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BROOME COMMUNITY COLLEGE

CATALOG

1989-90

ARCHIVES CATALOGS

ACCREDITATION

Broome Community College is a member of the Middle States Association of Colleges and Schools.

The College is supervised by the State University of New York and its curriculums are registered by the State Education Department.

The Civil, Chemical, Electrical and Mechanical Engineering Technology programs are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc., (TAC/ABET).

The Dental Hygiene Program is accredited by the Commission on Dental Accreditation and by the United States Department of Education, and the Nursing Curriculum is accredited by the National League for Nursing.

The Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association (AMA) has accredited four other curriculums-Radiologic Technology, Medical Record Technology, Medical Laboratory Technology, and Medical Assistant, which is also accredited by the American Association of Medical Assistants.

The Medical Record Technology program has double accreditation, too, having been approved by the American Medical Record Association as well as by the AMA. The Medical Laboratory Technology curriculum also has approval of the National Accrediting Agency for Clinical Laboratory Science (NAACLS) in conjunction with AMA. The Dietary program is approved by the Dietary Managers Association.

NON-DISCRIMINATION COMMITMENT

Broome Community College does not discriminate on the basis of race, sex, color, creed, age, national origin, disability, marital status, or status as a disabled veteran or veteran of the Vietnam era in the recruitment of students, the recruitment and employment of faculty and staff, or the operation of any of its programs and activities, as specified by Federal and State Laws and regulations.

The designated coordinator for compliance with Title VI and VII of the Civil Rights Act of 1964, as amended, Title IX of Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, as amended, and Section 402 of the Vietnam Era Veteran's Readjustments Assistance Act of 1974, as amended, is the Affirmative Action/Equal Opportunity Officer.

For further information or questions, contact this individual weekdays, during regular College hours.

THE COLLEGE PHONE NUMBER IS (607) 771-5000.

The College reserves the right at any time to make changes deemed advisable or necessary. The College, moreover, shall not be responsible for any typographical errors contained in this catalog.

For information about the College, its program, and its admissions procedure contact:

Office of Admissions
Broome Community College
P.O. Box 1017
Binghamton, New York 13902
Phone (607) 771-5001

Hearing impaired persons should phone (607) 771-5150 (Voice-TDD/TTY).

PARTNERS IN PROGRESS

Broome Community College

State University of New York (SUNY)

Broome County (College Sponsor)



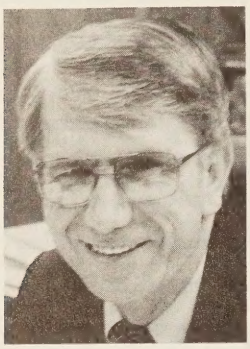
Broome Community College

BROOME COMMUNITY COLLEGE
1989-90
CATALOG

A comprehensive Community College Supervised by SUNY (State University of New York) and sponsored by the County of Broome.

BROOME COMMUNITY COLLEGE P.O. BOX 1017, BINGHAMTON, N.Y. 13902
PHONE (607) 771-5000

BCC
OFFICE OF THE PRESIDENT
607 771-5100



An Open Letter from the President

At Broome Community College we believe in you the student. Our mission is to help you meet your goals and to reach your full potential. We have been doing this successfully for over 41 years. The 21,000 graduates from our institution have proven themselves in some of the best universities and colleges in the country. Others have been successful in professional positions with major corporations. We are very proud of our alumni.

A major reason for our success in providing quality education over the years has been a competent and highly dedicated faculty. A commitment to small class size guarantees that students are able to have the attention they need in the classroom as well as outside. BCC can boast of having made a continuing major investment in modern technology and equipment. We feel that our students must have access to new technologies if they are to compete successfully in our modern world.

BCC is also very proud of its tradition of offering a variety of social, recreational, and fine arts activities. We encourage students to participate in student government, clubs, and other activities to the extent that their time allows. Thus, our campus community offers you, the student, the opportunity for a well rounded education.

As you review the catalog, I think you will find that the programs of study we offer will allow you to transfer to the university of your choice or enter the work force in a responsible position with a good salary. I urge you to contact our admissions office or the Dean of any particular division to obtain more specific information about any of the programs in which you are interested. We at BCC are proud of our tradition and feel that we offer quality education at a reasonable cost. Come take a look at us.

Sincerely,

Donald A. Dellow

Donald A. Dellow
President

ABOUT BROOME COMMUNITY COLLEGE

Broome Community College

Broome Community College is a comprehensive community college. It has programs designed to prepare graduates for immediate employment and for transfer to four-year colleges and universities at the junior, or third year, level.

In addition to its daytime enrollment of about 3,500 full-time students last year, the College has a sizable number of part-time students. There were about 3,000 in the evening program last year and more than 2,000 took courses during the Summer Session.

The College is co-educational, publicly-supported, and has historically attracted about two-thirds of its student body from Broome County and one-third from outside the county. The ratio has recently been closer to 80% and 20%.

The day student body can be classified into six parts, based on study objectives—the business programs, engineering and engineering technology cirriculums, health science courses, liberal arts programs, computer studies, and special career offerings.

The College is sponsored by Broome County, supervised by the State University of New York, and accredited by both professional and educational organizations (see inside front cover). Its programs, moreover, are registered with the State Education Department.

HISTORY OF THE COLLEGE

The College graduated its first class in 1949. These students had entered what was then known as the New York State Institute of Applied Arts and Sciences at Binghamton in the fall of 1947. The original institute was one of five founded in the state in 1946, following the pattern of six agricultural and technical institutes which New York had established earlier in the century. The first programs offered were all occupational in nature and included Chemical, Electrical and Mechanical Technology, as well as Medical and Technical Office Assistant curriculums.

In 1953 New York relinquished operating control of the school to a new sponsor, the County of Broome, under provisions of the State Community College Law, and the name was changed to Broome County Technical Institute. In 1956 the name was again changed to Broome Technical Community College, to reflect the increasingly comprehensive nature of the educational offerings. In 1971 the name became Broome Community College as the scope of curriculums continued to expand.

The Civil Technology program was added to the five original curriculums in 1957, Dental Hygiene was introduced in 1956, and the Business programs were expanded to include offerings in Accounting, Marketing, and Engineering Secretarial in the early 1960's.

An important change in the College's program began in the late 1950's as a result of a new emphasis on university-parallel or transfer programs to compliment the College's occupational offerings. Engineering Science, the first two years of an engineering program, was introduced in 1958, Liberal Arts and Sciences (now Liberal and General Studies) in 1962; and Business Administration in 1963.

In the late 60's interest began to develop in the health science field. As a result, the College introduced a degree-granting program in X-Ray Technology in 1965, added Medical Laboratory Technology in 1966, Nursing a year later, and Medical Record Technology in 1969. This year Physical Therapist Assistant makes its debut as BCC continues to respond to the needs of the community.

Criminal Justice and Early Childhood have been added since, and degree programs in Individual Studies have been introduced, along with Office Services Assistant. Additional new offerings have more recently been added in Computer Studies and Travel and Hotel Technology.

For its first five years, the school was housed in a refurbished State Guard Armory in downtown Binghamton. This building was located across from the Forum and was gutted by fire in September 1951. For the next five years, Kalurah Temple (now the Church of God building on Washington Street) and two other buildings in the city provided temporary quarters. In 1957 the College moved to its present campus just north of Binghamton. The first addition to the original campus came with the construction of Titchener Hall which was dedicated in 1963. The Library Building was completed five years later, and the Business Building opened in 1972.

A new Applied Technology Building has been completed and opened for classes at the beginning of the 1987 Spring Semester, the Science Building has been enlarged, and expansion of the Student Center was recently completed.

THE COMMUNITY

The community is an industrial and agricultural area in New York State's Southern Tier. It is in the approximate center of the state, measuring from east to west, and its southern extremity touches the Pennsylvania state line.

Binghamton is the principal city in Broome County, but it is only a part of the community known as the Triple Cities. Endicott and Johnson City, along with Vestal and other suburbs, help to make the community much larger in population and geography than the city of Binghamton.

Binghamton has a population of about 55,000 and Broome County's population exceeds 200,000. Diversified industry in the community includes such firms as IBM, General Electric, Link Flight Simulation, Savin, New York State Electric and Gas Corp., Universal Instruments and Endicott Johnson.

The College has become an integral part of the community since it was started in 1946. Many of the campus facilities are offered at nominal cost for use by responsible organizations, and most of the College's curriculums are designed to help fill the economic needs of the county.

THE CAMPUS

The College campus is located three miles north of Binghamton on Upper Front Street, which is Route 11 and Route 12 at this point running alongside of Interstate 81. Nine of the 12 buildings form two contiguous quadrangles to make a compact campus layout.

Most of the buildings are two stories high, of modern functional design, and made of brick with colored panelwall facing. They lie in a suburban setting in the virtual center of the College's 120 acres of land.

In addition to classrooms and laboratories, the campus has its own cafeteria, two gymnasiums, athletic fields and Theater. These facilities add up to make the campus a multi-million dollar investment in the youth of Broome and surrounding counties.

CAMPUS CARILLON

The College has a Maas-Rowe symphonic carillon, which tolls the hours with chimes and occasionally plays musical selections through its automatic music roll attachment. The carillon was a gift to the College, donated by the College Foundation.

HOW TO USE THIS CATALOG

To help readers find their way through the pages of this catalog, a few words of explanation may be helpful. The catalog is assembled in essentially five parts, as follows:

PART 1, which consists of pages 5 to 36, contains the policies, procedures and regulations of the College. And as the accompanying table of contents shows, these are divided into such areas as admissions, financial aid, expenses, academic affairs and student affairs.

PART 2, which runs from pages 37 to 76, is a rundown of the College's programs and curriculums, arranged in alphabetical order by Academic Division. It shows the courses taken by students in each semester, along with the number of class hours, laboratory hours and credits for each. A summary of the field for which each curriculum prepares its graduates is also included.

PART 3, from pages 77 to 86, is directed to part-time students. It has academic information for them including a presentation of the programs of study for them for degrees and certificates. It also includes information about the College's Center for Community Education and its non-credit offerings (page 86).

PART 4, covering pages 87 to 130, carries the descriptions of the college's courses. These are arranged in alphabetical order, according to subject matter, starting with Anthropology.

PART 5, which appears on pages 131 to 146, is essentially the listing of the administration and faculty of the College. There is also information about the State University of New York, of which the College is a part.

Attention is also directed to the INDEX on pages 147 to 149. This is an alphabetical listing of the topics covered in the catalog together with the page numbers where one can find them.



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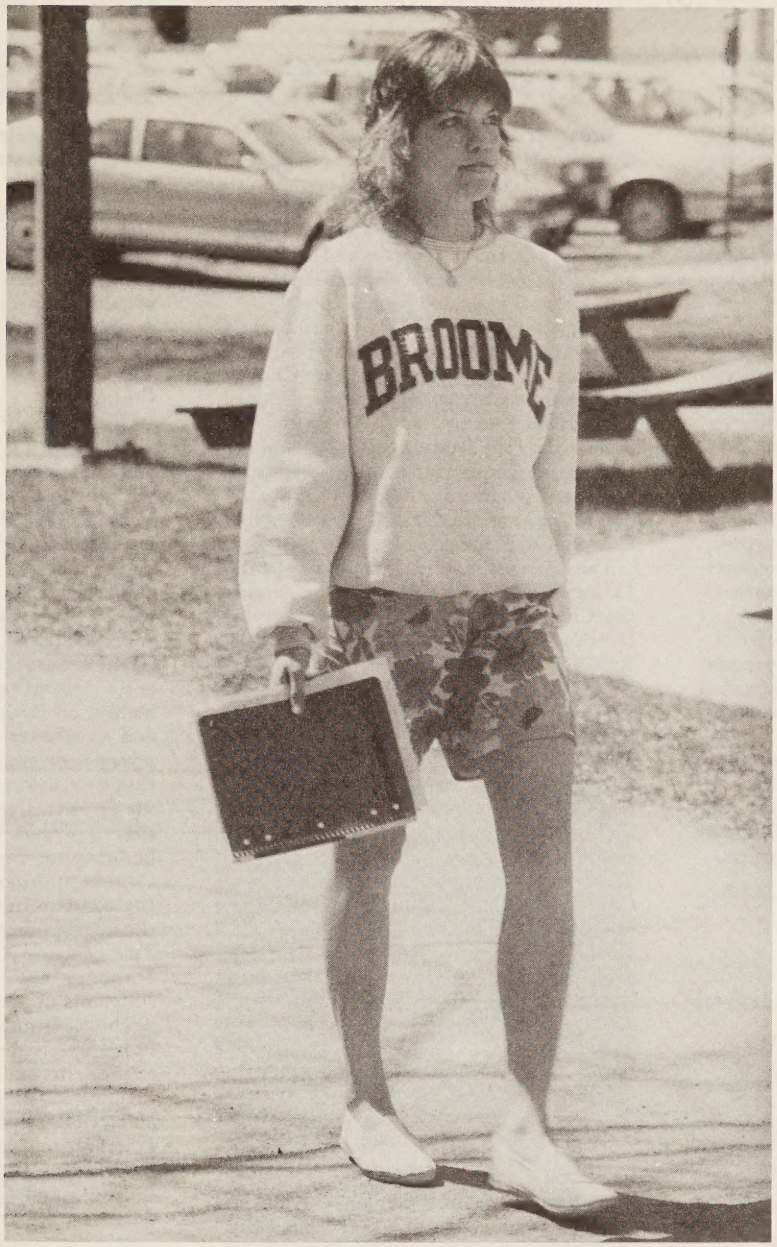
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PART 1

COLLEGE MISSION AND GOALS STATEMENTS

Broome Community College is a public, comprehensive, educational institution providing: (1) arts and sciences transfer degrees, (2) occupational degrees and certificate programs in health, business and technology, (3) developmental learning program, (4) student and administrative services, and (5) continuing and community education programs.

GOALS

1. Access—Broome Community College is a full opportunity college providing opportunities to all students who are seeking access to the College program.

2. Diversity—Broome Community College provides a diverse academic and student development program, supported by appropriate educational and administrative services.

3. Quality—Broome Community College provides quality programs, and utilizes internal and external evaluation processes to preserve and improve program excellence.

4. Community—Broome Community College supports efforts designed to improve economic development and quality of life in the region, the College has a commitment to provide businesses, industries, agencies and other community members with educational courses, training programs and other services as needed.

5. Resources—Broome Community College seeks and acquires the necessary levels of physical, fiscal and human resources requisite to preserve and improve program quality.

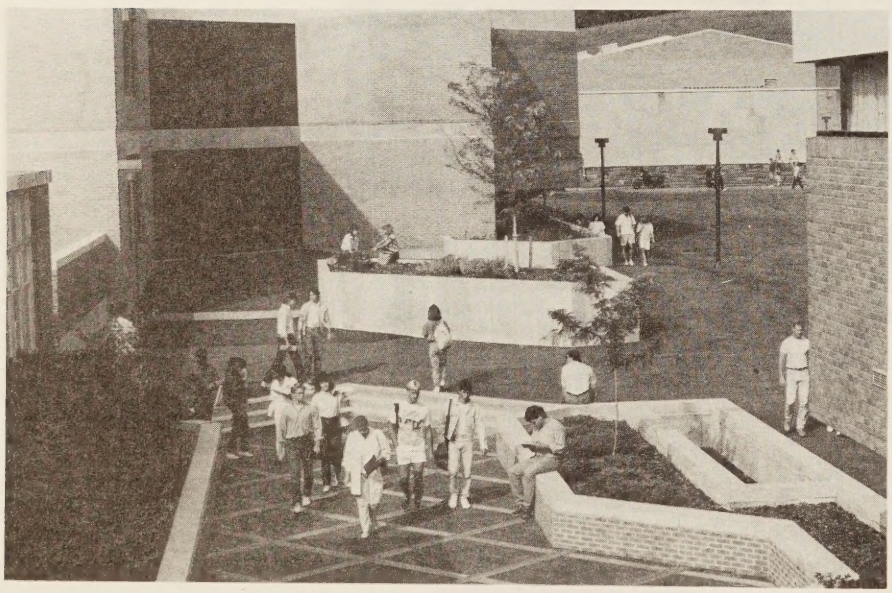
6. Governance—Broome Community College leadership collaborates with the numerous internal and external governance bodies to foster and sustain collegial rapport to ensure responsible decisions and actions.

AUTHORIZATION

Broome County is the sponsor of Broome Community College, which was established in 1946 and is one of the oldest community colleges in the State University of New York (SUNY) system. The College is governed by a Board of Trustees and funded by annual appropriations (operational and capital) from state and county funds. Students pay up to one-third of the College's operating costs through tuition. Five of the trustees are appointed by the County Executive, with approval of the County Legislature, four by the Governor and one is elected by the student body from among their peers. County and trustee governance policy and practice are based on a mutually determined modified "Plan C" resolution of County Government.

The College President is appointed by the College Board of Trustees, with approval of the Chancellor of the State University of New York and the SUNY Board of Trustees. His/Her direct supervisor is the chairman of the College Board of Trustees. The SUNY Chancellor provides an umbrella type of leadership to the president through a deputy for community colleges to ensure that appropriate SUNY policies and regulations and State Education Department (SED) guidelines for post-secondary institutions are followed.

Degree-granting authority for Broome Community College is given by the Board of Regents of the University of the State of New York, and the College's academic program is accredited by the Middle States Association of Colleges and Schools.



DEFINITION

Since the date of charter in 1946, as the New York State Institute of Applied Arts and Sciences at Binghamton, the College has moved from a limited access technical institute to a comprehensive community college with a Full Opportunity enrollment policy. Broome Community College is organized into three primary divisions: academic, administrative, and student services, each of which is administered by a Vice President reporting to the College President.

The Board of Trustees establishes College policy, and the Administration interprets and implements it, working in conjunction with the Sponsor, State University of New York (SUNY), the State Education Department (SED), and the various accrediting bodies that evaluate and make recommendations on the objectives and outcomes of the College program.

Broome Community College emphasizes classroom and applied laboratory educational activities rather than being a research institution. By developing a quality program and excellence in teaching, the College provides diversified educational opportunities to individuals of varied ages. A particularly attractive feature of the College is that it draws most students from the geographic region known as Broome County. It provides an important link with the communities of Broome County and the surrounding regions in the Southern Tier of New York State, making social, economic and cultural contributions to recipients of these services.

The College provides students with a broad spectrum of both humanistic and scientific/technological related competencies through its 31 degree-granting programs and its 14 certificate programs. These programs encompass six major areas, including Engineering and Engineering Technology, Business and Office Technology, Health Sciences, Liberal and General Studies, Computer Studies, and other occupational programs. We successfully place approximately 90% of our graduates in employment or continued study. The College is approved by the New York State Board of Regents to offer Associate in Arts (AA), Associate in Science (AS), Associate in Applied Science (AAS), and Associate in Occupational Studies (AOS) degrees.

Enrollment includes both full- and part-time students attending day and/or evening classes. Classes run from 8 a.m. to 10 p.m. weekdays, and there are a number of weekend classes.

45 COLLEGE PROGRAMS OF STUDY

DEGREE-GRANTING CURRICULUMS IN 31 FIELDS OF STUDY

Business and Office Technologies
- 1-Accounting
 - Emphasis in Banking/Finance
- *2-Business Administration
- 3-Hotel/Restaurant Management
- 4-Marketing/Management/Sales
 - Emphasis in Management
 - Emphasis in Marketing
 - Emphasis in Entrepreneurship
 - Emphasis in Real Estate
 - Emphasis in Retail Management
- 5-Travel and Tourism
- 6-Executive Secretary
- 7-Word Processing
- 8-Office Services Assistant

Technology, Engineering and Computing
- 9-Chemical Engineering Technology
- 10-Civil Engineering Technology
- 11-Electrical Engineering Technology
- 12-Mechanical Engineering Technology
- 13-Industrial Technology
- *14-Engineering Science
- *15-Computer Science
- 16-Data Processing
- 17-Computer Technology

Health Sciences
- 18-Dental Hygiene
- 19-Medical Assistant
- 20-Medical Laboratory Technology
- 21-Medical Record Technology
- 22-Undergraduate-Nursing
- 23-Physical Therapist Assistant
- 24-Radiologic Technology

Liberal and General Studies
- *25-Liberal Arts (Associate in Arts and Associate in Science degrees)
- 26-Early Childhood
- 27-Criminal Justice
- 28-Fire Protection Technology
- *29-Individual Studies (AS & AAS)
- *30-Paralegal
- *31-Communications and Media Arts



Unless otherwise indicated, degree programs are occupational in nature and designed to prepare graduates for immediate employment.

* These programs are designed to prepare graduates for transfer to four-year colleges and universities in the third, or junior, year.

CERTIFICATE PROGRAMS IN 14 FIELDS OF STUDY

These programs generally consist of half the number of credits in an associate degree curriculum and are, therefore the equivalent of one year of college study. Most are given in the evening.

1-Business Skills:
may be designed to concentrate in
- Accounting
- Management
- Marketing-Sales and Retailing

2-Office Technologies

3-Early Childhood

4-Criminal Justice

5-Dietary Manager

6-Fire Protection Technology

Industrial Technology with emphasis in:
- **7-Chemical**
- **8-Civil**
- **9-Electrical**
- **10-Mechanical**
- **11-Production Managment**

12-Interior Design

13-Liberal Arts

14-Paralegal Assistant

ADMISSIONS

ADMISSIONS PROCEDURES

Students are selected as they apply, complete the admissions process, and are found suitably qualified for a particular program. The following items are required by the Admissions Office before a decision can be made on a student's application.

1. Application for Admission.
2. A non-refundable $10 application fee (If the applicant is reapplying, seeking admittance into a part-time Early Admissions Program, or is a qualified Educational Opportunity Program (EOP) applicant, this fee may not have to be paid.)

If official transcripts are available from previous high school or college work, they should be sent to the Admissions Office to help in placing the student in the proper courses.

Here are a few items to note concerning the application process:

1. Students who wish to enroll full or part-time in any curriculum must apply through the Admissions Office.
2. American College Testing (ACT) or Scholastic Aptitude Test (SAT) score reports are not required, but if either or both are available, they should be forwarded to the Admissions Office.
3. Recommendations from high school personnel are helpful, if available.
4. An interview with an Admissions Counselor at Broome Community College is desirable.
5. The postmark date of an application is an important part of the admissions criteria and helps the College implement its first-come, first-served equal opportunity policy.
6. Most programs require that prerequisite courses be successfully completed by June 30 of the summer preceding fall enrollment.

Applicants should recognize that it is their responsibility, not a counselor's or admissions officer's, to complete the necessary forms for admission and to see that all required transcripts and/or other information are received and recognized by the Admissions Office counselors. Completing the application process is the first step toward matriculation, which also includes being accepted into a curriculum and enrolling in coursework.

Acceptance into Broome Community College only applies to the particular semester designated in the acceptance letter. If one does not attend then and wishes to enroll in a future semester, he/she must reapply. Records are kept on file for three years, so the reapplication process usually involves filling out another application form, unless additional college coursework has been completed.

BCC Study Abroad Programs have separate admissions criteria (see pg. 21).

More information or answers to questions are available at the

Admissions Office
Broome Community College
P.O. Box 1017, Binghamton, N.Y. 13902
Phone: (607) 771-5001

STUDENTS FROM OTHER NATIONS

GENERAL INFORMATION

The College welcomes students from other countries and is authorized by the United States Department of Justice to issue the necessary Certificate of Eligibility for F-1 Student Status (Form I-20). For admissions information and applications write to: Admissions Office, Broome Community College, P.O. Box 1017, Binghamton, New York 13902, USA.

The College is part of the State University of New York system and is commited to the promotion of international understanding as well as economic and personal development through the education and training of people from all nations. This commitment is carried out, in part, by offering educational programs in the areas of Liberal Arts and General Studies, Business, Engineering, and the Health Sciences. Each semester the College enrolls approximately 100-150 students from 25-30 foreign countries. International students may come to the College for the first two years of a traditional four year college degree, for a variety of technical training programs, or for English language training. International students are fully integrated into the regular academic programs at the College and those working for a Bachelor's degree often remain in the area to complete their four year degree at the nearby State University of New York at Binghamton. The College successfully transfers students to most colleges in the U.S.

The College recognizes that a good deal of learning comes from interacting with members of a new culture, including other students, and residents of the local community. Accordingly, the College has a number of social and cultural programs specially designed for international students. These include an active International Students Club and a variety of activities which help the student "experience America."

The College provides an advisor to assist students from other countries in all areas of student life while at Broome Community College. Both academic and non-academic problems may be discussed with the advisor whose office is in the Wales Building, Room 210. The advisor also assists the student in finding housing since the college has no student dormitories. The College is in the process of providing housing space, but it will not be available for the 1989-90 year. It is estimated that college costs and living expenses are approximately $10,000 per year.

ADMISSIONS REQUIREMENTS

English Language Proficiency

A. Students who submit a TOEFL score of 525 or better will be admitted to the College. They will be admitted to the program of their choice if they have the academic background necessary for that program. Academic program requirements are listed on page 9 of the Catalog.

B. Students who have not taken the TOEFL or who score below 525 can be admitted to the college if they have the academic requirements and have **one** of the following:

 1. A Michigan test score of 65 or a TOEFL score of 400.
 2. Successful completion of four years of English language at the secondary or college level.

Other Requirements

A. Applicants must submit the "Application for Admission" and "Applicant Information Sheet" which can be obtained by writing to the Admissions Office.

B. Applicants must submit a transcript in English (certified translation) of all secondary school and college work completed.

C. Applicants must provide an affidavit of financial support. Forms will be mailed along with application information.

D. After acceptance to the College the student must show evidence of health coverage. Information on our health plan will be mailed out upon acceptance to the College.

E. Applicants must submit TOEFL or Michigan test scores if either of these tests have been taken.

F. Applicants whose native language is not English must take a special language proficiency examination at the College before they are allowed to register for classes. This test is used for English language placement. Students must enroll in English language coursework every semester until they have met the proficiency requirements of their academic program. Students who do not meet any of the admission requirements above can only be admitted to the College by special arrangement and must be in "sponsored" groups of 10 or more. Along with other students at the College, international students are also required to take a mathematics placement test.

ACADEMIC PREPARATION FOR ADMISSIONS

CURRICULUM	REQUIRED High School subjects	RECOMMENDED High School subjects
Business Administration Accounting Hotel/Restaurant Management Management Marketing Travel & Tourism Real Estate Entrepreneurship	Sequential Math I, II, III Sequential Math I for all other business programs	2 units Mathematics 2 units Science College preparatory courses
* **Chemical Engineering Technology**	Regents Chemistry (Min. grade 74) Sequential Math I, II, III or equivalent	Additional Regents Math, Science and Chemistry courses Physics
* **Civil Engineering Technology**	Sequential Math I, II, III or equivalent Regents Physics (Min. grade 65) or General Physics (Min. grade 74)	Additional Mathematics Technical courses
† **Computer Science**	Sequential Math I, II, III or equivalent Precalculus Math or Advanced Algebra Min. grade 74, all courses	Additional Mathematics Physics Computer Programming Keyboarding
† **Computer Technology**	Sequential Math I, II, III or equivalent Min. grade 74, all courses Physics	Additional Mathematics Computer Programming Keyboarding
† **Data Processing**	Sequential Math I, II, III or equivalent. Int. Alg. may replace Seq Math III Min. grade 74, all courses	Additional Mathematics Computer Programming Keyboarding
† **Dental Hygiene**	Sequential Math I, or equivalent Biology, Chemistry (Regents or General)	College Preparatory courses
* **Electrical Engineering Technology**	Sequential Math I, II, III or equivalent (Min. grade 74) Regents Physics (Min. grade 65) or General Physics (Min. grade 74)	Additional Mathematics Technical courses
* **Engineering Science**	Sequential Math I, II, III or equivalent Advanced Algebra and Precalculus Math Regents Chemistry Regents Physics Min. grade 80, all courses	Additional Mathematics Science courses Technical courses Computer Programming
Liberal and General Studies including Communication & Media Arts	(Students should review degree/emphasis models on pages 63-65. These might help in selecting HS preparatory courses.)	4 Units Mathematics (Sequential I, II, III and Math 12) 3 Units Science 3 Units Foreign Language 3 Units Social Studies
Criminal Justice Early Childhood Fire Protection Technology Paralegal	Students should review program requirements. These might be helpful in selecting its preparatory courses	3 Units Mathematics 3 Units Science 3 Units Social Science
* **Mechanical Engineering Technology**	Sequential Math I, II, III or equivalent (Min. grade 74) Regents Physics (Min. grade 65) or Gen Physics (Min. grade 74)	Additional Mathematics Technical courses Keyboarding
† **Medical Assisting**	Sequential Math I or equivalent Biology (Regents or General) Chem. (Regents or General)	Additional Mathematics Sciences courses Typewritting and/or Keyboarding
*† **Medical Laboratory Technology**	Sequential Math I, II and III or equivalent Biology (Regents or General) Chem. (Regents or General by permission of Department Chair)	Physics
† **Medical Record Technology**	Sequential Math I or equivalent Biology (Regents or General)	Additional Mathematics Science, Chemistry, Typewriting
† **Nursing**	Sequential Math I or equivalent Biology (Regents or General) Chem. (Regents or General) Min. grade 74, above courses	College preparatory courses
Office Technologies Executive Secretarial Office Services Word Processing	Sequential Math I or equivalent	2 units Typewriting, 2 units Science 1 unit Communications or Business English
*† **Physical Therapist Assistant**	Sequential Math I, II or equivalent Biology (Regents or General) Chemistry (Regents or General) Min. grade 74	Physics Additional Mathematics
† **Radiologic Technology**	Sequential Math I, II or equivalent Biology (Regents or General) Min. grade 74 for Biology and Math Another Science course	Additional Mathematics Physics (Regents or General) Chemistry (Regents or General)

ALL GRADES ARE FINAL CLASS AVERAGES AND NOT REGENT EXAM GRADES

*BCC has a developmental program that enables students lacking the proper academic preparation for degree-granting curriculums to enroll in appropriate credit or non-credit courses that will qualify them. They can take these courses at BCC or elsewhere during the summer preceding their enrollment. The College reserves the right, however, to consider for admission only those applicants who have completed all prerequisites by June 30. Applicants who elect to take these courses during the spring and fall semesters would need three years to complete the curriculum.

†In these programs, Broome Community College gives priority for admissions to Broome County residents who will graduate from high school this academic year or are service veterans. Students interested in a degree in the Health Science or Computer Studies curriculums who enter the College in another program are cautioned that there is no guarantee that a petition to transfer will be approved. They should discuss the possibilities with the appropriate department chairperson.

SPECIAL ADMISSIONS PROGRAMS

Early Admissions is a program for high achieving high school students who can benefit from taking college courses, full or part-time, before graduating from high school. While high school seniors are usually enrolled in this program, qualified juniors and sophomores may also be eligible.

Anyone interested in part-time Early Admissions should contact the Admissions Office or his/her high school counselor for the special application form. Full-time applicants should use the regular student application.



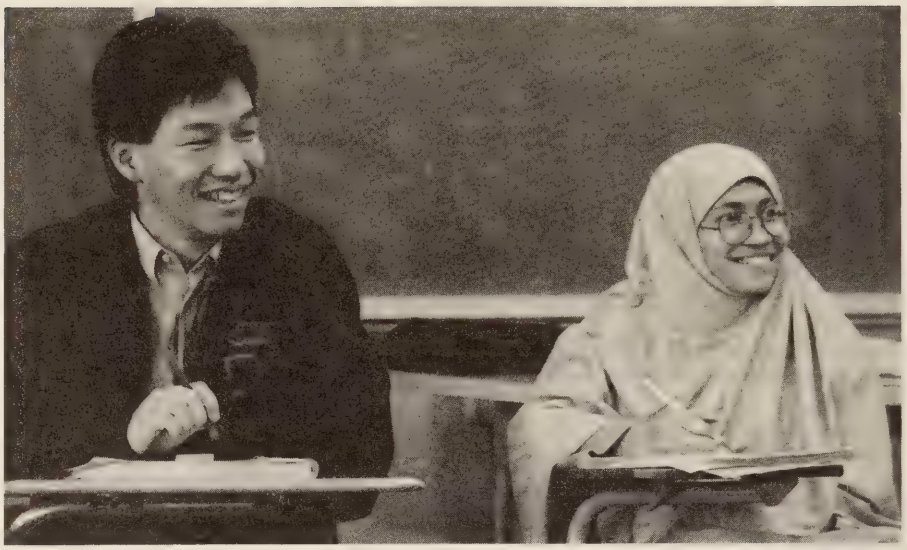
Educational Opportunity Program (EOP) The objective of the Educational Opportunity Program is to provide, in part, educationally-related support services and supplemental financial assistance to those students whose educational and economic circumstances have limited their post-secondary educational opportunities.

Educational Opportunity Program (EOP) is designated for students who are educationally and economically disadvantaged. It provides additional economic aid and remedial or developmental academic help. For more information, contact the Educational Opportunity Program in the Wales Building (771-5220).

The BCC PACE (Public Assistance Comprehensive Employment) Program is a cooperative effort between The Department of Social Services and Broome Community College. It is geared specifically to help people with dependent children who are receiving public assistance and wish to return to school for vocational education.

We help students cope with the responsibilities of being both a parent and a student, plus help to coordinate child care and transportation needs. Those interested in this program may contact The BCC Pace Program, Room 213, Student Affairs Building, telephone: 771-5350.





International Students (from other nations). Broome Community College is authorized under Federal Law to enroll non-immigrant alien students. Admissions requirements for foreign students or those whose native language is not English are on page 8.

Non-High School Diploma applicants may qualify for a high school equivalency diploma by successfully completing 24 credit hours of coursework at BCC or any college in a degree or certificate program. Students currently in high school or those having been out of high school less than one year typically cannot qualify for this program. Additional information is available at the Admissions Office.

Transfer Credit for Students who have taken or are taking college level coursework is subject to the approval of the chairperson of the student's academic department at BCC. Grades earned will not be entered into the cumulative grade-point average at Broome Community College. Students must in all cases submit to the College Admissions Office official transcripts of all college level work taken and/or being taken at another college before formal acceptance will be granted.

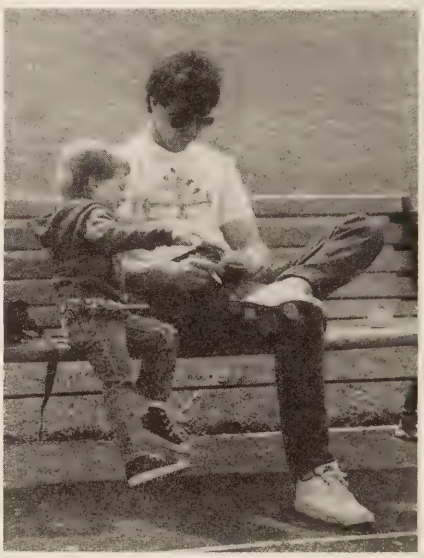
Students transferring courses to BCC will be required to complete in credit hours the equivalent of a semester's course of study at BCC for graduation. The determination of this minimum will be the responsibility of the department faculty sponsoring the curriculum, but in no case will the requirement be less than 12 semester credits. Ordinarily this means that the last 12 credits will be taken at BCC.

FULL OPPORTUNITY PROGRAM

Broome Community College has a Full Opportunity Program, which is designed to give every individual a chance to fulfill his/her own personal goals and potential.

This means that everyone who is a previous June graduate of a Broome County high school or a veteran from Broome County with a high school diploma is given priority for admission until March 1 and is guaranteed admission into the College, but not necessarily assured of space in the program of his/her choice. To be admitted into any program of study, all applicants must meet the academic requirements of that program. When an individual does not have the required academic background for a particular curriculum, he/she will be accepted into a program or selection of courses for which he/she is qualified if space is available. Some students may require more than two years to complete a program of study.

Admission to the College shall not be denied on the basis of age, disability, ethnic origin, nationality, political belief or affiliation, race, religion or sex.



A TDD/TTY TELEPHONE

A TDD/TTY telephone unit is available in the Student Support Services Office to make it accessible for the hearing impaired. The number is 771-5234. The college also has one in the Counseling and Student Development Center - 771-5210.



TUITION DEPOSIT POLICY

Students admitted to the College prior to August 1 will be requested to submit a $50 tuition deposit. This payment will be applied toward the Fall Semester tuition bill for those students who register. Students who do not register for the Fall Semester can obtain a refund of the tuition deposit, through the end of the first week of classes, by submitting a request in writing to the College Controller. After the end of the first week of classes, the tuition deposit is non-refundable.

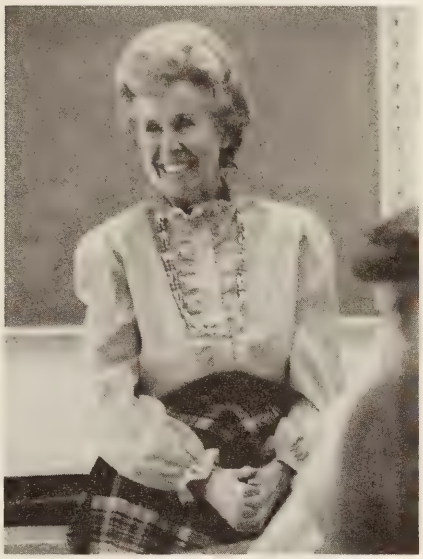


HONORS PROGRAM

The Honors Program is designed for the student who expects to be involved in her/his own education. Participants are challenged to expand their understanding of life and reality through specially designed honors courses and extra curricular activities, close contact with faculty, and involvement with other highly motivated students.

Student's benefits include an increased awareness of political, economic, and social issues, development of critical thinking skills, and preparation for creative leadership in the 21st Century, as well as an Honors diploma, an important asset in the competition for placement at selective four-year institutions.

To apply, students who believe they meet the qualifications below may obtain an application through high school guidance departments or from Dr. JoAnne Maniago, Program Coordinator, Honors Program, Broome Community College, Binghamton, New York 13902.



HONORS PROGRAM ADMISSIONS REQUIREMENTS - HIGH SCHOOL SENIORS

1) GPA of at least 3.2 (80 average).
2) SAT combined score of 1,050 or above with no subscore below 450.

 OR

 ACT composite score of 24 or higher with Math and English subscores of at least 21.
3) Two letters of recommendation:

 One from a teacher.

 One from a non-scholastic source such as an employer, club advisor, coach, or volunteer supervisor.
4) Students from New York - Regents Diploma.

FOR CONTINUING OR TRANSFER STUDENTS

1) Full-Time Students having completed one semester at an accredited two or four year college with a GPA of at least 3.5. or part-time students enrolled in at least 6 hours per semester having accumulated 12 hours of credits with a GPA of at least 3.5.

HEALTH REQUIREMENTS FOR HEALTH PROGRAMS

A student's enrollment in one of the Health Science programs listed below is conditional upon passing a physical examination and obtaining appropriate immunizations when required. Students should contact the department chairpersons for specific information.

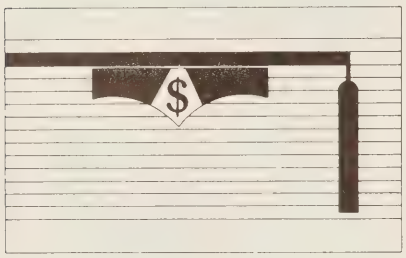
Dental Hygiene
Medical Assistant
Medical Laboratory Technology
Medical Record Technology
Nursing
Physical Therapist Assistant
Radiologic Technology



FINANCIAL AID

Considerable financial aid is available at Broome Community College, and the College maintains a Financial Aid Office to help students. Information and applications for financial aid are sent to students who are seeking full-time enrollment when they apply for admission. Any part-time student planning to take six credit hours or more may qualify for financial aid by formally applying and being accepted into a degree or certificate program. Part-time students may receive information/applications by contacting the Student Financial Aid Office.

Financial aid at BCC falls into three broad categories - grants that do not have to be repaid, loans on which interest rates are usually low and that have to be repaid after graduation or leaving college, or part-time employment called Work-Study. Assistance usually comes from a combination of these resources, commonly referred to as a "financial aid package."



STUDENT AND FAMILY RESOURCES

A student's financial need is a term used to describe the funds required by a student to pay for his/her college education in excess of the amount that he/she and parents can afford to pay. Financial need is determined by using a standardized formula, which defines the "initial" or "demonstrated" need. The formula:

Cost of attendance (including tuition, fees, books, room, board, transportation, etc.)

– Family Contribution (based on student's (and parents') assets household size, number in college, liabilities, etc.)

= Financial Need

The Financial Aid Office at Broome Community College operates on the premise that all parents and students have a responsibility to contribute as much as they can toward the cost of the student's education. This contribution plays the primary role in determining the actual initial need.

To qualify for financial aid, a student must be enrolled in a degree program of the College and be taking six credit hours or more, in addition to having initial or demonstrated need. This need can be met in a number of different ways - a combination of grants, loans and work-study funds in varying amounts of each. This combination is put together by the financial aid administrator and is called a "financial aid package."

Many students would be unable to attend college without financial aid. However, no matter when application for financial aid is made, disbursal of awarded money is not always made on an "as needed" basis. Therefore, every student should have sufficient resources available for living and educational expenses for several weeks into a semester.

ESTIMATING EXPENSES

Below is a chart showing the estimated average costs for the 1989-90 college year for student expenses. It covers a 9-month period which is the length of the college year, September to May.

	*Living w/ Parent (no dependents	Not Living w/Parent No dependents
*Tuition	$1,250	$1,250
Fees	72	72
Books	400	400
Transportation	600	600
Personal Expenses	750	750
Rent	750	1,250
Food	750	1,250
Child Care	NA	NA
Total	$4,572	$5,572
Non-NY State Resident: (Additional tuition)	$1,250	$1,250
Total	$5,822	$6,822

* The tuition amount had not been officially established when this catalog was being prepared. The amounts in this column may be subject to increase.

NOTES—

*1) An out-of-state resident must pay an additional $1,250 tuition.

**2) Allowances for additional expenses are made for students in certain academic programs.

***3) The transportation allowance may be increased depending on where the student is residing.

4) A child care allowance is added to the student's budget only when documentation of these expenses is submitted to the Financial Aid Office.

—ALL COSTS ARE SUBJECT TO CHANGE—

TUITION DEFERRAL/ PAYMENT

All Financial Aid funds will be applied to the recipient's outstanding tuition and fees for the current semester. Those applicants without finalized financial aid packages may be able to defer tuition payment by making arrangements with the Student Accounts Office.

Broome Community College does not defer SUMMER tuition based on a TAP award.

HOW TO APPLY FOR FINANCIAL AID

To be considered for financial aid, students must apply each academic year.

FEDERAL AND STATE GIFTS

All financial aid applicants will be expected to apply for two major sources of financial aid: the federal government's Pell Grant and New York State's Tuition Assistance Program (TAP). Out of state residents should contact their State Educational Agency or the Financial Aid Office for information on state grant assistance from their state of residence. Although the College provides information, applications and assistance, these funds are not generated by the college and must be applied for directly by the student to the agency. Students may apply for the Pell and TAP grants with the New York State Family Financial Statement (FFS).

Part-time students who have already completed 6 credit hours and enroll for at least 6 but less than 12 credits may be eligible for New York State's Aid for Part-Time Study (APTS) program. Unlike TAP, students must apply directly to the college for determination of eligibility.

Applications and information regarding these and other programs are available at the Financial Aid Office (Wales Building, Room 101).

CAMPUS-BASED FINANCIAL AID

To be considered for both the federal government's Pell Grant AND financial aid administered by the College (Campus-Based Aid), students must submit the Family Financial Statement (FFS) to ACT Student Financial Aid Services and the BCC Application for Financial Aid to the Financial Aid Office. By filing the forms outlined above, students will be considered for the following Campus-Based financial aid in addition to the federal government's Pell Grant:

FEDERAL CAMPUS-BASED AID

- Perkins Loan (Formerly National Direct Student Loan-NDSL)
- College Work Study (CWS)
- Supplemental Educational Opportunity Grant (SEOG)

INSTITUTIONAL CAMPUS-BASED AID

BCC Foundation Grants

The College administers a number of programs which have been established by private individuals, companies, and organizations. These scholarship and grant programs have varying eligibility requirements. Students who wish to apply for these special scholarships should complete the FFS and the BCC Application for Financial Aid.

PRIORITY FUNDING DATES

Fall Semester April 15
Spring Semester December 1

Incoming students should apply for financial aid when they apply for admission. Because all campus-based funds are limited, students are strongly encouraged to submit the appropriate forms at least four weeks before the above priority dates.

Completed applications received prior to April 15 will be given first priority. Applications received after this date will be considered as long as funds are available.

The FFS should be mailed to ACT Student Financial Aid Services before March 30 to be received at the College by April 15.

VERIFICATION

Once the Financial Aid Office has received the results of your processed application from ACT Student Financial Aid Services, you may be selected for a process called verification. This is a procedure used to check the accuracy of the information you reported on your federal financial aid application. You may be required to bring or send any supporting documentation that is necessary to verify the information you reported. If selected, you must complete the process before your financial aid can be awarded.

NOTIFICATION OF DECISIONS

Students are generally notified of the action taken on their application shortly after May 30. Students who apply late will be notified as folders are completed. An explanation of student's rights and responsibilities is sent to all financial aid recipients at the time the award is made. Interested students may receive a copy of this information before an award is made by contacting the Financial Aid Office.

If a Student's request for aid is denied, the reasons for the decision are explained. Students may request an appeal on financial aid decisions by writing a letter to the Director of Financial Aid.

NOTE - Students who have been administratively dropped from their class(es) for non-attendance will receive a reduced financial aid award. If financial aid has already been disbursed, a repayment of a portion or all of these funds may be owed to the College.

SATISFACTORY ACADEMIC PROGRESS FOR TAP, APTS & TITLE IV AID

Federal regulations require aid recipients to maintain "satisfactory academic progress" before receiving Title IV aid (Pell, Perkins Loan, Work-Study, SEOG, Stafford Student Loan (formerly Guaranteed Student Loan -GSL), SLS and PLUS). The College also requires satisfactory academic progress before students may receive grant assistance from the BCC Foundation or Educational Opportunity Program (EOP). The guidelines used to determine academic progress are outlined on page 25 of the catalog.

Students who have been placed on academic probation may continue to receive financial assistance while on probation. These students have one semester to achieve the minimum standards before facing dismissal from the college.

Students who have been academically dismissed will be denied aid until such time as they can meet the criteria set forth for satisfactory academic progress. Guidelines for appealing the decision of academic dismissal are outlined on page 25 of the catalog. Students who successfully petition for a waiver of dismissal may be eligible for financial aid.

The college has also adopted New York State Tuition Assistance Program (TAP) and Aid for Part-Time Study (APTS) guidelines which require good academic standing for students to continue receiving TAP & APTS. Contact the Registar's Office in Room 206 of the Wales Building for a copy of the guidelines.

PACKAGING POLICY

At Broome Community College the equity concept of financial aid packaging is used. Eligible students are funded on a need basis and a first-come, first-served order.

The Pell Grant and the New York State Tuition Assistance Program (TAP) represent the floor of the package followed by any employment, loans and grants available.

This kind of financial aid packaging ensures that any student who wishes to attend a post-secondary institution will have the opportunity to obtain the needed funding.

An example of the equity concept:

(1) Total Student Costs (Budget)

(2) Subtract Resources:
- a) Parental Contribution
- b) Student Summer Savings ($700, $900 or $1,200) or Student Income/ Asset Contribution (whichever is greater)
- d) Other Resources

Initial Financial Need

(3) Subtract:
- a) Tuition Assistance Program (TAP) Grant or Estimate
- b) Pell Grant

Unmet Need for Campus-Based Aid

(4) Subtract:
- a) Educational Opportunity Program (EOP)
- b) Perkins Loan, (Formerly NDSL)
- c) College Work Study
- d) Supplemental Educational Opportunity Grant (SEOG)
- e) BCC-Grant in Aid

Unmet Need *

*Most students are able to satisfy their unmet need through the Stafford Student Loan Program. The amount of unmet need may vary from year to year.

RIGHTS AND RESPONSIBILITIES OF FINANCIAL AID RECIPIENTS

Student recipients of financial aid are the beneficiaries of money made available by a variety of agencies - federal, state, institutional, and/or private. The act of accepting a financial aid award signifies that the recipient knows about, understands, and is willing to comply with both the rights and the responsibilities involved with that award. Thus, it is the recipient's **RIGHT TO KNOW:**

1-What federal, state and institutional financial aid programs are available.
2-The deadlines for submitting application forms for each assistance program
3-The cost of attending the college and the refund policy
4-The criteria used by the college to determine academic eligibility
5-What resources (such as parental contribution) are considered in the calculation of financial need and how much of that need, as determined by the college, has been or will be met, and how (loan, grant and/or work-study)
6-How much of the financial aid will have to be repaid, and what portion is a grant (gift-aid). If the aid is a loan, the recipient should know what the interest rate is, the total amount that must be repaid, the payback procedures, the length of time allowed to repay the loan and when repayment is to begin.
7-How the college determines whether the student recipient is making satisfactory progress and what happens if not.

It is the recipient's **RESPONSIBILITY** to:

1-Know and understand fully the financial aid program and one's specific financial aid package before signing forms.
2-Make sure that all application forms are completed accurately and submitted, on time, to the right place.
3-Pay special attention to and accurately complete the application for student financial aid. Errors can result in long delays in the receipt of financial aid. Intentional misreporting of information on application forms for federal financial aid is a violation of law and is considered a criminal offense subject to penalties under the U.S. Criminal Code.
4-Return any and all additional documentation, verification, correction, and/or new information requested by either the Financial Aid Office or the agency to which the application is submitted.
5-Read and understand all forms that one signs and keep copies of them.
6-Accept responsibility for all agreements signed.
7-Notify the lender of changes in name, address or school status, if one has a loan.
8-Perform the work that is agreed upon in accepting a College Work-Study award.
9-Know and comply with the deadlines for application and/or reapplication for aid.
10-Know and comply with the school's refund procedures.



GRANTS

NOTE-The following financial aid information is current as of Spring 1988. Due to the nature of financial aid programs, some of this information may be changed during the academic year. Please contact the Financial Aid Office for updated information.

ELIGIBILITY	AMOUNT PER YEAR	WHERE/HOW TO APPLY
TUITION ASSISTANCE PROGRAM (TAP)		
Full-time student at any accredited college in New York State. Resident of New York State. Income and academic guidelines involved.	$350 to $3650, not to exceed tuition. Based on income.	New York State Higher Educational Services Corp. (HESC) 99 Washington Avenue Albany, N.Y. 12255 Forms available in BCC Financial Aid Office
AID FOR PART-TIME STUDY (APTS)		
Part-time students and residents of New York State. Must have already completed 6 credit hours and enroll for at least 6 but less than 12 credit hours. Income and academic guidelines involved.	Amount of tuition or less depending on need and availability of funds.	Forms and further information available in BCC Financial Aid Office. Application must be submitted no later than the end of the second week of classes.
REGENTS COLLEGE SCHOLARSHIP **(Scholarships for nursing students and children of deceased or disabled veterans also available)**		
Based on SAT or ACT test scores. For full-time students at any accredited college in New York State who are New York State residents.	$250 per year. Depending on income and class level, a TAP award may also be received that could combine with the $250 to equal the tuition charge.	New York State Higher Educational Services Corp. (HESC) 99 Washington Avenue Albany, N.Y. 12255
EDUCATIONAL OPPORTUNITY PROGRAM (EOP)		
Full-time and half-time students with financial need and less than an 82 high school average. Family income must be below a specific level.	Varies according to individual need. Average of $275 per student per academic year.	Application available in the Educational Opportunity Program Office at BCC.
PELL GRANT PROGRAM		
Accepted or enrolled full-time or half-time undergraduate students who demonstrate financial need.	From $200 to $2200. Cannot exceed 60% of the cost of college expenses.	Forms available in BCC Financial Aid Office and in high school guidance counselor offices after Jan. 1.
SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)		
For full-time or half-time students with demonstrated high financial need. On first-come, first-served basis.	Up to $4000 depending upon need and cost of college expenses.	Student must submit an ACT Family Financial Statement and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office and in high school guidance offices.
BCC FOUNDATION GRANTS		
Full-time or half-time students On first-come, first-served basis.	Varies according to individual need.	Submit an ACT Family Financial Statement and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office.

LOANS

ELIGIBILITY	AMOUNT PER YEAR	WHERE/HOW TO APPLY
PERKINS LOAN (Formerly NDSL)		
For full-time or half-time students with financial need. Student borrows from the college on own signature. Awarded on a first-come, first-served basis.	Amount varies according to student's need. Up to $4500 for first two years of undergraduate study, and up to $9000 for all years of undergraduate study.	Student must submit an ACT Family Financial Statement and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office.
STAFFORD STUDENT LOAN **(Formerly Guaranteed Student Loan - GSL)**		
For full-time or half-time students. Student borrows on own signature from a participating bank. Student must show financial need.	Maximum of $2625 per year for the first and second year of an undergraduate program, and $4000 per year for the remaining undergraduate years - not to exceed a cumulative of $17,250.	New York State residents indicating an interest in a GSL by checking the appropriate box on an ACT Family Financial Statement, will receive a loan application by mail. GSL applications can also be obtained at most banks or credit unions. Processed applications must be on file in Financial Aid Office, along with BCC Application for Financial Aid.
SUPPLEMENTAL LOANS FOR STUDENTS (SLS) **(Formerly Auxiliary Loans to Assist Students - ALAS)**		
For students who are financially independent of their parents.	Maximum of $4000 per year. Total loan limit is $20,000.	NYS residents can apply on Guaranteed Student Loan application by checking appropriate box. Applications are available at most banks or credit unions from state of residence.
PARENT LOAN FOR UNDERGRADUATE STUDENTS (PLUS)		
Loan program for parents of dependent undergraduate students enrolled at least half-time.	Maximum $4000 per year per student. Total loan limit is $20,000 per student.	Applications are available at most banks or credit unions from state of residence.
PAULINE PARKER LOAN		
For full-time students who are Broome County residents, under 25 years of age, and in financial need.	$1,000 maximum per year. No more than $500 per semester. No interest charge.	Forms available in BCC Financial Aid Office.
EMERGENCY LOANS		
For full-time or half-time students in financial emergencies (i.e. an unforseen expense affecting the ability of the student to attend college). Sponsored by the BCC Foundation.	$250 maximum. No interest charge. Repayment in 30 days.	Forms available in BCC Financial Aid Office. Student must substantiate need with Financial Aid Officer for all loan requests and obtain a cosigner.

EMPLOYMENT

ELIGIBILITY	AMOUNT PER YEAR	WHERE/HOW TO APPLY
COLLEGE WORK-STUDY (CWS)		
For full-time or half-time students with financial need. Awarded on a first-come, first-served basis.	Students may work up to 20 hours a week when classes are in session or up to 37½ hours a week during vacation. Wage: Minimum.	Student must submit an ACT Family Financial Statement and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office.

FOR ADDITIONAL INFORMATION CONSULT THE BCC FINANCIAL AID BROCHURE OR THE FINANCIAL AID OFFICE.

EXPENSES

TUITION

***The tuition amount had not been officially established when this catalog was being prepared. The amounts in this column may be subject to increase.**

Tuition and fees are payable at the Student Account Office according to a payment schedule released by the College each semester. The responsibility for payment rests upon the student, who will be billed prior to the start of each semester. Both full-time and part-time students who have registered for courses will be "de-registered" if they fail to meet established due dates for tuition/fee payment.

Students who are administratively dropped for non-attendance during the semester continue to have a tuition and fee obligation.

STUDENTS CARRYING 12 OR MORE CREDIT OR CREDIT-EQUIVALENT HOURS

—considered full-time students.

For New York State residents
With residency certificate $625* per semester
Without residency certificate $1,250* per semester
For out-of-state residents $1,250* per semester

Students admitted to the College prior to August 1 will be requested to submit a $50 tuition deposit. This payment will be applied toward the Fall Semester tuition bill for those students who register. Students who do not register for the Fall Semester can obtain a refund of the tuition deposit, through the end of the first week of classes, by submitting a request in writing to the College Controller. At the end of the first week of classes, the tuition deposit is non-refundable.

STUDENTS CARRYING FEWER THAN 12 CREDIT OR CREDIT-EQUIVALENT HOURS

—considered part-time students.

For New York State residents
With residency certificate $50* per credit
Without residency certificate $100* per credit
For out-of state residents $100* per credit hour

NOTE-See "credit equivalent" on page 23 for associated changes and information.

Many students may qualify for financial aid, some of which is applicable toward tuition. **See Financial Aid section on pages 12 through 15.**

SEE TUITION REFUND POLICY ON PAGE 17.

RESIDENCY CERTIFICATE

To qualify for the resident tuition fee, a student is required by law to present **once each academic year** on or before registration a residency certificate indicating that he or she has been a legal resident of the State of New York for one year and of a county for six months.

Broome County Residents—Full-time students admitted to the College will be mailed a copy of the application for residency certificate prior to registration. This application must be completed and presented at the time of tuition payment.

Out-of-County Residents—Full-time students admitted to the College will be mailed a copy of the application for residency certificate prior to registration. The application must be completed, notarized and presented to the County Treasurer of the **County in which the student resides.** The County Treasurer will then issue a residency certificate to the student. This residency certificate must be presented at the time of tuition payment.

Part-Time Students must meet the same requirements as stated above. The application for residency certificate form is available at the student Account Office.

The completed residency forms are required once each academic year.

Failure to comply with this requirement will result in paying double tuition, not to exceed the limitations cited above.

BOOKS, SUPPLIES, UNIFORMS AND OTHER STUDENT EXPENSES

Students provide at their own expense the necessary books and instructional materials. These may be purchased at the College Book Store maintained by the Faculty-Student Association for the convenience of the students. The cost varies, depending on the curriculum, from about $400 to $500.

In the Health Science curriculums students will provide, at their own expense, their own transportation to off-campus locations for necessary clinical and other experience.

In addition, some curriculums require uniforms. Among these are Hotel Technology, Nursing, Radiologic Technology, Medical Laboratory Technology, Medical Assistant and Physical Therapist Assistant. Gym clothes are necessary for physical education classes. Dental instruments and pants-type uniforms are prescribed for Dental Hygiene students.

The following expenses are in addition to the usual cost of about $400 per year for books and are included in financial aid allowance for students enrolled in these programs:

	Freshman	Senior
Civil Technology	$ 60	$ 90
Dental Hygiene	679	110
Electrical Technology	75	0
Mechanical Technology	45	60
Medical Assistant	75	0
Medical Lab Technology	52	0
Medical Records Technology	105	0
Nursing	435	0
Office Technologies	30	50
Radiologic Technology	145	0

COLLEGE FEES

*These fees are subject to increase as they had not been officially established when this catalog was being prepared.

Application Fee $10*
**Late Registration 10*
Parking Registration 1*
Transcript Fee 1*
Returned Check Fee 10*
Credit by Examination
Non-Laboratory Course 25*
Laboratory Course Maximum 65*
$25 plus $10 for each clock hour of lab examination (See page 16)

Credit by Evaluation 50 plus*
(Portfolio Assessment)
In addition to the $50 fee there is a charge of $5 per credit hour. This $5 is refundable if credit is not granted. The $50 is non-refundable, however. (See page 16.)

Chemistry Laboratory Fee $5* per semester
For all students taking chemistry laboratory courses with 200 numbers ($5 per course)

Computer Usage Fee $TBD
(Fee for supply intensive computer courses under consideration at time of printing.)

Lab Usage Fee $TBD
(Fee for supply intensive courses with Labs under consideration at time of printing.)

**Late registration period begins on the first day of classes.

STUDENT FEES

*These fees are subject to increase as they had not been officially established when this catalog was being prepared.

STUDENT ACTIVITY

Full-Time Student . . . $33* per semester
Part-Time Student $2* per credit hour

The activity fee entitles all students to admission to varsity games, convocations, dances and parties, as well as a subscription to the student newspaper and the opportunity to participate in a varied program of co-curricular activities, including intramural athletics.

The Student Activity Fee is budgeted and administered by the Student Government with the approval of the College Administration and in recent years has been apportioned to the following activities:

Campus Publications
Newspaper, Yearbook
Program Board
Speakers, Performers, Dances, Movies, Picnics, Special On and Off-Campus Programming
Club Council
32 funded clubs including most curriculum organizations
Athletics
13 male and female intercollegiate teams, coaching stipends, intramurals, administrative expenses
Student Government Association
Administrative expenses, vehicle maintenance, class gift, audit, supplies

SEE REFUND POLICY ON THIS PAGE.

ACCIDENT INSURANCE, HEALTH SERVICE FEE

Full-Time Student Accident Insurance $10 per year
Health Service Fee
Full-Time Students $3 per semester
Part-Time Students . . . $1 per semester
(This is a compulsory fee and covers all services provided by the Health Service Office.)

Money collected from the Health Service fee is used for physician services, drugs, supplies, educational material, diagnostic equipment, special health programs and related health Service expenses. The fee is non-refundable is the student withdraws from the College.

The accident policy covers the student for 12 months commencing the first day of classes for expenses incurred as a result of any accident, on or off campus. Maximum coverage is $1,500 per accident. Claim forms are available in the Health Service during the year, and must be filed with the Health Service before expenses will be paid. Students who withdraw and wish a refund of their accident policy must apply directly to the insurance company.



INTERNATIONAL STUDENT HEALTH INSURANCE

International students must show that they have health insurance coverage before they may enroll at the College. Health Insurance is available through the College at the following rates (which may be subject to change): Fall semester - $145, Spring semester - $114, and summer - $87. Claim forms are available in the Health Service during the year. Students who withdraw and wish a refund of their health insurance fee must apply directly to the insurance company. Note that the "Health Insurance" mentioned in this paragraph is different from the "Health Service Fee".

MEDICAL INSURANCE

The College **does not** provide medical insurance, but it is available through a number of insurance companies.

GRADUATION/CERTIFICATE FEE

Graduation* $18
Certificate (part-time evenings only) $8
*Subject to increase

Paid during semester preceding graduation and is refundable if the student does not graduate or earn certificate.

ALUMNI LIFETIME MEMBERSHIP $25

Membership in the Broome Community College Alumni Association is optional. The lifetime dues are payable during the semester preceding graduation, and they entitle graduates to complete Association benefits.

FOR GENERAL INFORMATION CONCERNING CREDITS, TRANSCRIPTS AND TUITION FOR STUDY ABROAD, INTERSESSION AND SUMMER SESSION SEE PAGE 21.

REFUND POLICIES, PROCEDURES

TUITION REFUND POLICY

Fall and Spring Semesters

Students who **officially withdraw** from classes during the first four weeks of a **semester** will be entitled to tuition refunds on the following basis -100% refund during the first week, 50% during the second week, and 25% during the third and fourth weeks. After four weeks of the semester there will be no refunds. See College Calendar on page 150 for additional information on dates for tuition refunds.

NOTE—Participants in the New York Civil Service Employees Association Labor Education Action Program (LEAP) will be subject to the tuition refund regulations specified in the LEAP guidelines.

Summer Session

Students who withdraw from Summer Session, classes will be entitled to a 100% refund during the first week of the term. After that, there will be no refunds.

FEE REFUND POLICY

The student activity fee is refundable according to the same schedule as tuition. See "Tuition Refund Policy" above.

REFUND PROCEDURE

An application for refund of tuition and fees must be made in writing in the Registrar's Office (W-206). The application must be on the College form provided. The date on which the application is filed is considered the official date of the student's withdrawal and any refund to which the student may be entitled is computed using the date.

OTHER PROCEDURES

Students who defer tuition on Financial Aid and who then become ineligible to receive that aid or any portion of it will be subject to an immediate obligation for payment and/or collection of disbursements. The College reserves the right to use whatever collection procedures it deems appropriate to satisfy any outstanding debt.

ACADEMIC AFFAIRS

REQUIREMENTS FOR GRADUATION

COMMON REQUIREMENTS FOR ALL FOUR DEGREES GRANTED BY THE COLLEGE

1. Successful completion of all courses for the degree as contained in this Catalog.
2. A 2.00 Cumulative GRADE POINT AVERAGE in those courses applicable to the degree.
3. Filing of a Declaration of Candidacy and Request for Degree Checkout in final semester.
4. Recommendation of the faculty for the awarding of the degree.
5. Satisfaction of all obligations to the College.
6. Specific Curriculum Requirements
7. Satisfaction of General Education Requirements. See page 19.

THE ASSOCIATE IN SCIENCE DEGREE (AS)

This degree is awarded to graduates of the Business Administration, Communication & Media Arts, Computer Science, Engineering Science and Individual Studies curriculums, and Mental Health and the Science Option in Liberal and General Studies.

6. A.S. Curriculum Requirements:
 a. At least 30 credits in the humanities, natural sciences, mathematics, and social sciences.
 b. Physical Education - 2 credits (for Business Administration, Liberal Arts, Computer Science and Engineering Science students only).
 c. Satisfaction of General Education requirements.

THE ASSOCIATE IN APPLIED SCIENCE DEGREE (AAS)

This degree is awarded to graduates of curriculums in these fields of study:

Accounting
Chemical Engineering Technology
Early Childhood
Civil Engineering Technology
Computer Technology
Criminal Justice
Data Processing
Dental Hygiene
Electrical Engineering Technology
Executive Secretarial
Fire Protection Technology
Hotel Technology
Hotel/Restaurant Management
Individual Studies
Industrial Technology
Marketing/Management
Mechanical Engineering Technology
Medical Assistant
Medical Laboratory Technology
***Medical Record Technology**
Nursing
Office Services Assistant
Paralegal
***Physical Therapist Assistant**
***Radiologic Technology**
Travel & Tourism
Word Processing

6. Curriculum Requirements
 a. The minimum number of credits in a student's major field as determined by each academic department. These are courses intrinsic to and required by the various curriculums.
 b. A minimum of 20 credits in Liberal and General Studies courses will include:
 1) Social Sciences: a minimum of 6 credits including 3 in designated courses
 2) Natural and Physical Sciences (including mathematics): a minimum of 6 credits
 3) Humanities: a minimum of 6 credits in English
 4) Satisfaction of General Education requirements. See page 19.
 c. Satisfactory completion of all courses in a curriculum or as approved in a department.
 *d. Summer clinical experience required for graduation in curriculums noted.

THE ASSOCIATE IN ARTS DEGREE (AA)

This degree is awarded to graduates in the Liberal and General Studies curriculum.

6. Liberal and General Studies requirements are distributed as follows:
 a. English: 12 credits, including ENG 110, 220, LIT 200 and LIT elective.
 b. History: a minimum of 6 credits in approved courses.
 c. Humanities: a minimum of 6 credits (6 in Philosophy or 6 in a foreign language).
 d. Mathematics: Students who have completed fewer than 3 units of secondary school mathematics (through 11th year math) are required to take two semesters of college level mathematics. Students who have completed 3 units of secondary school mathematics (through 11th year math) are required to take one semester of college level mathematics. Students who have completed more than 3 units of secondary school mathematics (including 11th year math) are not required to take additional mathematics. They may, however, elect an appropriate math course or an elective in another field.
 e. Natural and Physical Sciences: a minimum of 8 credits.
 f. Social Sciences: a minimum of 6 credits in designated courses.
 g. Electives: 16 credits minimum. A maximum of 16 credits may be taken outside the offerings in Liberal and General Studies with the approval of the dean of the division.
 h. Completion of two writing emphasis "W" courses.
 i. Physical Education: 2 credits.
 j. Satisfactory completion of all courses in a curriculum or as approved in a department.

ALTERNATIVE AND INDIVIDUALIZED LEARNING

Broome Community College considers various non-traditional learning activities for credit. By documenting and demonstrating the learning that has taken place, **matriculated students** may be awarded academic credit.

The divisional dean is the initial contact for students interested in obtaining more information about non-traditional study and examination programs. Students will be assisted in determining whether or not such study or evaluation would be worth pursuing.

The academic department, sponsor of the student's degree program, is responsible for integrating any credit achieved in this manner into the student's academic program. All procedures entail fees. Inquire in your divisional office. Following are examples.

ADVANCED PLACEMENT EXAMINATION (AP)

The College will recognize for credit the AP examinations of the College Entrance Examination Board. A score of three or above is generally acceptable for credit, but each academic department establishes its policy. Laboratory courses may require additional lab work for full credit for a college course. Credit awarded will be handled as a transfer credit.

COLLEGE PROFICIENCY EXAMS (CP)

The CP exams of the University of the State of New York will be recognized for credit upon approval by the appropriate department. Credit awarded will be handled as transfer credit.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

The College will recognize successful achievement at or above the 50th percentile on CLEP **subject** exams in accordance with SUNY and American Council of Education guidelines. Approval of credit for degree requirements or electives is determined by the appropriate department. Credit approval will be handled as transfer credit. Under certain circumstances, a department may accept general examination scores.

BCC CREDIT BY EXAMINATION (CBE)

The College in many instances provides for full or part-time BCC matriculated students credit by examination for knowledge gained outside the traditional classroom situation. A letter grade will be posted on the student's transcript upon completion of the exam. Guidelines for this procedure are available from the College's chairpersons and deans. If a student receives an "F" grade after normal completion of a course, no credit by examination may be given in that subject.

PORTFOLIO ASSESSMENT

(Special Individual Assessment)

The College will evaluate for credit various types of learning acquired outside the usual classroom environment. Particular criteria for awarding credit may be applied by an academic department. Approval of credit is the responsibility of the appropriate department. Students must clearly identify what has been learned. Contact the divisional dean for additional information. Fees, p. 16.

SPECIAL ASSESSMENT OF EXPERIENTIAL LEARNING

The College will evaluate for credit various types of learning acquired through participation in learning experiences or training provided by business, industry, unions, professional societies, governmental agencies or the military. Particular criteria for awarding credit may be applied by an academic department, and approval of credit is the responsibility of the department. Contact the divisional dean for additional information.

SELF-INSTRUCTIONAL LANGUAGE PROGRAM

(Ernest Giordani Coordinator)

The College offers an instructional program to groups of 3-5 students in Arabic, Chinese, Greek, Hebrew, Irish, Janpanese, Korean, Lithuanian, Polish, Russian, Swedish, and Welsh. Students must be highly motivated as the instructional program relies upon self-study combined with tutorials. Emphasis is on speaking. Broome Community College adheres to the standards and guidelines of the National Association of Self-Instructional Learning (NASILP).

ACADEMIC PROGRAMS

GENERAL EDUCATION: COMMON REQUIREMENTS

As part of its commitment to provide every graduate with the skills and knowledge essential to a full and productive life, Broome Community College has developed an integrated program of general education for every course of study. However diverse their academic curricula and personal goals, General Education serves to acquaint students with the concerns and obligations common to all citizens of a democratic society, and it seeks to equip them with the intellectual skills and dispositions to participate effectively in public life.

Broome Community College's General Education program aims to ensure that each graduate will:

1. Communicate effectively orally and in writing
2. Think clearly and critically
3. Become sensitive to the ethical dilemmas of daily life and experienced in moral reasoning and discourse
4. Embrace one's civic obligation to be informed about and participate in public affairs
5. Acquire a global and international outlook
6. Gain facility in mathematical analysis, and knowledge of scientific and technological concerns, procedures, achievements and consequences
7. Understand and apply the elements of good health and physical fitness.

These goals are pursued in a variety of contexts: in courses which all students are required to take such as ENG 110 and writing emphasis ("W") courses, in a range of social science and humanities courses, in mathematics and science courses, and in technical courses in business, health sciences, and technology.

Listed below are the specific General Education requirements with the seven objectives above shown in parentheses

- -English 110 (Objectives 1,2)
- -English 220†(Objectives 1,3,2)
- -Two writing emphasis "W" courses (Objectives 1,2)
- -Two Social Science courses. **One** of these must be from a designated "civic education" list*(Objectives 4,5,2)
- -Mathematics and science courses per curriculum requirements(Objectives 6,2,4)
- -Physical education requirements per curriculum(Objective 7)

†Engineering Technology Students take ENG 150

*ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130

Medical Laboratory Technology students will substitute a designated LIT course for ENG 220 and fulfill writing requirements through alternative arrangements.

These General Education requirements are built into the degree programs which are displayed in the pages which follow. However, each student is responsible for making sure that s/he has met General Education requirements for the AA, AS, and AAS degrees. For further information students should seek assistance from their advisors and/or chairpersons and deans.



PROGRAMS OF THE COLLEGE

DEGREE PROGRAMS

Graduates of Broome Community College receive associate degrees, and the courses of study are organized into four divisions - Business and Office Technologies; Technology, Engineering and Computing; Health Sciences; Liberal and General Studies. Liberal Arts courses are included in all curriculums, and all students must meet the College's General Education requirements. Applicants to the College should consider carefully the type of program they wish to pursue, for the nature of the offerings makes it difficult to switch from one curriculum to another after commencing studies.

BUSINESS AND OFFICE TECHNOLOGIES

The Business curriculums are designed primarily to prepare graduates for immediate employment in one of 11 fields - Accounting, Banking, Hotel/Restaurant Technology, Real Estate, Travel & Tourism, Retail Management, Entrepreneurship, Management, Marketing, Word Processing, Executive Secretarial and Office Services Assistant. In addition, there is a 12th option, Business Administration, that combines more university parallel preparation with a minimum of job-oriented courses. This program is intended for the person who plans to continue his/her college education for a baccalaureate degree, even though he/she may want to work for a while before transferring to a four-year college.

It is possible to transfer from all programs. But because each student's transfer credits are evaluated by the four-year institution, the number of credits accepted can vary.

HEALTH SCIENCES

Opportunities for men and women interested in the health sciences field are provided in seven areas - Dental Hygiene, Medical Assisting, Medical Laboratory Technology, Medical Record Technology, Nursing, Physical Therapist Assistant and Radiologic Technology. Graduates are prepared to work immediately after graduation in physicians' or dentists' offices, laboratories, schools, nursing homes or hospitals. A.A.S. graduates of these programs are qualified to take whatever licensing or certification examination their professions require as a result of the state/national accreditation held by all BCC Health Science programs. Graduates may be eligible to transfer to upper division colleges and universities. The College also offers a Dietary Manager Certificate program for those working in the field.

LIBERAL AND GENERAL STUDIES

University parallel curricula in Arts and Sciences, and Special Career Programs of an occupational nature are included in this division. Curriculums in Arts and Sciences prepare students for transfer to four-year colleges and universities. While the aim of liberal learning is to broaden human perspective and deepen understanding through the study of philosophy, history, natural sciences, literature and the arts, students who identify career/professional goals early can also begin to develop appropriate academic concentrations. Liberal and General Studies degree programs are also offered for those seeking immediate employment. Refer to the career models on page 63 through 64 in this catalog.

The College offers, through its Special Career Programs Department, degree opportunities in five other academic areas -Early Childhood, Criminal Justice, Fire Protection Technology, Individual Studies and Paralegal Assistant. All lead to the Associate in Applied Science degree, and Individual Studies students may earn either that degree or the Associate in Science degree, depending on their program of study. All are conducted under the Special Career Programs Department.

TECHNOLOGY, ENGINEERING AND COMPUTING

In the area of technical education, the College offers 9 programs. One, Engineering Science, is in effect the first two years of an engineering curriculum. Students who do satisfactory work in it should experience little difficulty in transferring to engineering colleges at the third-year level.

Four others are designed to educate engineering technicians in the fields of Chemical Engineering Technology. Civil Engineering Technology, Electrical Engineering Technology and Mechanical Engineering Technology. Students in these programs are prepared for employment in various types of technical work immediately after graduation, although many students do transfer to four-year colleges.

The Computer Studies Department offers three programs - Computer Science, Computer Technology and Data Processing. The Computer Science program is designed for transfer to four-year colleges, while graduates of the other two are prepared for immediate employment.

The final program in the technical field offered by the college is Industrial Technology.

CERTIFICATE PROGRAMS

Broome Community College also has certificate programs which are less than two years in length, have more specific objectives than the associate degree offerings, and consist of about one year of college credit. Some are designed to prepare students for jobs that require specialized higher education, but not necessarily a college degree; some provide students with an opportunity to upgrade their academic backgrounds or expand their qualifications for a particular field of study; and some offer college credits and additional training of people already working in the field.

Most of the certificate offerings carry college credits, and they can lead a person into some of Broome Community College's degree-granting curriculums. They can be taken on a full-time or part-time basis, and most of them are offered in the evening although some are available through day classes. No specific high school courses are required for enrollment.

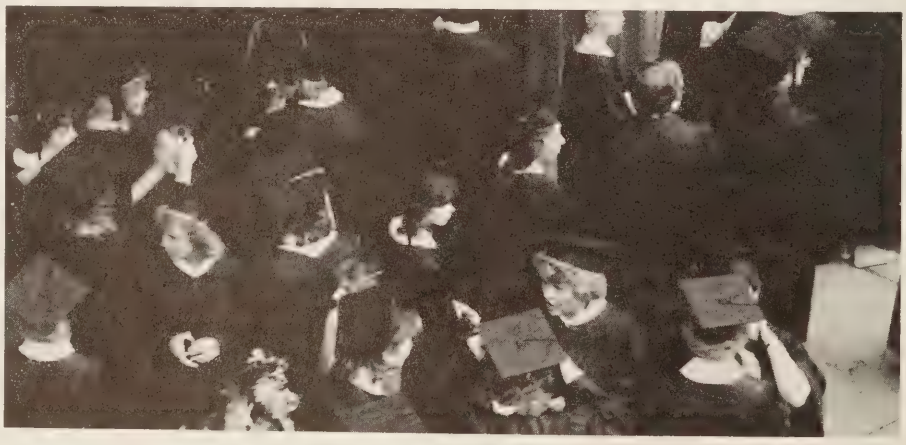
Further details, a listing of courses, and literature about most of these certificate programs are available in Room 101 of the library.

CERTIFICATE PROGRAMS

Business Emphasis
- **Accounting**
- **Management**
- **Marketing/Sales/Retailing**

Early Childhood
Criminal Justice
Dietary Manager
Fire Protection Technology
Industrial Technology Emphases
- **Chemical**
- **Civil**
- **Electrical**
- **Mechanical**
- **Production Management**

Interior Design
Liberal Arts
Office Technologies
Paralegal Assistant



INTERNATIONAL STUDIES PROGRAM

Broome Community College is a founding member of the College Consortium for International Studies, a group of 110 colleges spreading geographically from Canada to Florida and from California to Maryland. This consortium, during the 1988-89 academic year offered students about 65 overseas academic programs in 27 foreign locations.

The programs range from structured, formal courses at affiliated schools and institutions abroad, to service-learning and contract-independent study courses. Students may choose from short-term programs in January and during the summer to longer term, semester and year-long programs.

SEMESTER ABROAD PROGRAMS

BCC provides formal, structured programs lasting for a semester, a year or two years, in England, Denmark, France, Spain, Italy, China, Colombia, Cyprus, Ecuador, Greece, Ireland, Portugal, Sweden, Israel, Mexico, Scotland, Germany and Switzerland. Students study a full semester program (usually 15 to 18 credits) that is arranged prior to their departure at affiliated schools, institutions, colleges or universities abroad. BCC maintains close communication with consortium offices in New York, London and Jerusalem to facilitate the placement of students in qualified institutions abroad.

The subject areas range from liberal arts courses to specialized programs, such as criminal justice, international business and languages. Costs of these programs vary greatly, with emphasis on high quality programs at public institutions. The costs approximate those at U.S. public colleges. For 1988-89, the cost of a full semester in the popular program in England was about $3,300. This includes full room and board, all tuition cost, and many extras.

Many BCC students will find their academic and personal lives enriched through a cultural experience difficult to match in a conventional two-year course of study in this country.

ADMISSION TO PROGRAMS

Admission to the College does not automatically insure admission to BCC program's overseas; separate application must be made. Students will be evaluated on their academic ability, motivation, maturity and potential adaptability to a foreign culture. In addition to BCC approval, interviews with personnel from affiliate consortium institutions may be required. All programs are available to students from any college or the general public. At least one-half of the participants last year were community residents who went on short-term programs.

JANUARY & SUMMER SHORT PROGRAMS

During each academic year BCC conducts a variety of short-term programs in January and in the summer months. Students at BCC who have been introduced to study abroad through these short-term programs, usually two to three weeks in length, often decide to study overseas for a semester or year.

The short-term courses have grown in scope, as well as in number. During recent intersessions, students were able to study Italian Culture and Art in Italy and Tropical Field Ecology in the Virgin Islands. Costs for these programs last year started at $880 for the courses. A list of the January offerings is usually available by November.

The summer programs vary in length from two weeks to one month. Recent offerings have included Antiquities of Ireland, Italian Culture and Language History, Culture of Spain and North Africa and Field Ecology in Australia.

During the summer, there are special month-long programs at the University of Madrid for Spanish students and the University of Caen for French students. The cost of these programs was $2,495 each for 1989, but most students are able to qualify for scholarships under a special grant from the Spanish or French governments. Similar programs are offered in Italy and Germany. A full list of courses being offered during the summer is usually available in March.



STUDENTS FROM OTHER NATIONS
(See Page 8)

CREDITS, TRANSCRIPTS AND TUITION

For Study Abroad, Intersession and Summer Session

Students register at BCC and pay the appropriate tuition, which in many cases covers the instructional cost abroad. Students are monitored through consortium offices at the college they attend. Upon the successful completion of the formal program or after fulfillment of the contract, students will receive a BCC transcript reflecting the grades achieved or the course equivalents for the work done through the contract, greatly facilitating transfer of credits to other American institutions.

Full-time students registering for courses that are scheduled other than in the Fall or Spring Semesters will be charged at the part-time tuition rate. Sessions other than fall and spring semesters will be called Summer Session and Intersession. Students earning credits in Summer Session and Intersession courses may earn up to 18 credits in the fall or spring semesters or up to 21 credits with permission of the appropriate dean and department chairperson.

Students who wish to earn more than six hours during any of the Summer Session terms or the Intersession are required to obtain the approval of the appropriate dean and department chairperson. The refund policy is not in effect for students taking courses in Intersession. Refund policies in semester length programs are determined by the receiving foreign institutions.

Grades received for all courses taken from the beginning of the Fall Semester through the end of that semester will be considered first semester grades. Grades received for all courses taken from the end of the first semester through the end of the end of the second semester (even if taken in January or abroad) will be recorded as second semester grades.

Summer Session is treated like a third semester. Its dates begin after the Second Semester Master Schedule of courses is complete through the beginning of the fall semester (grades for all Summer Session terms under the transcript heading, Summer Session).

All credits earned are Broome Community College credits, which allows students to use their financial aid packages for semester length programs.

Students may earn up to 18 credits per semester, leading to an associate degree. Credits for Intersession/short-term programs range from one to six, depending on the time spent abroad and the instruction offered in the program.

For additional details about any of the above programs, students should contact the International Studies Program Office at Broome Community College in Titchener Hall (Phone 771-5021).

COOPERATIVE PROGRAMS WITH OTHER COLLEGES

Broome Community College has direct transfer agreements with a number of four-year colleges to facilitate the acceptance of BCC graduates into the third year of study. The number of colleges with which BCC has such agreements is increasing each year. Further details are available in the Counseling and Student Development Center (Wales Building, Room 200).

IN ENGINEERING SCIENCE

The Engineering Science Department has a joint admissions program with SUNY Binghamton (Watson School). It has a General Articulation Agreement with the Association of Engineering Colleges of New York State and separate agreements with Wilkes College and the Clarkson University School of Management. It also has an agreement with Binghamton High School to aid students wanting to enter the Engineering field. Contact the Department of Engineering Science for more information.

WITH SUNY BINGHAMTON

TRANSFER AGREEMENT

All Broome Community College students who have graduated or will graduate with an AA or AS degree with a grade point average of at least 3.0 will be admitted, upon application, as matriculated students in Harpur College of SUNY at Binghamton as space permits. Those students graduating with the above degrees but with a grade point average between 2.6 and 3.0 are usually admitted. Others, including those with an AAS degree, should contact the SUNY at Binghamton Office of Admissions. Admitted students will be granted junior-year standing upon presentation of 56 or more transferable credits.

CROSS-REGISTRATION

Full-time BCC students enrolled in full-time studies (12 or more credits) may cross-register at SUNY Binghamton for one course each semester. The courses for which they cross-register must be courses that are not available at Broome Community College. No additional tuition is necessary. Additional information is available in the Registrar's Office in the Wales Building, Room 206.

WITH KEYSTONE JUNIOR COLLEGE

BCC students may also cross-register at Keystone Junior College in LaPlume, PA for one course each semester. The courses for which they cross-register must be ones that are not available at Broome Community College, and they can take them without paying additional tuition. Additional information is available in the Registrar's Office (Wales Building, Room 206).

WITH COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY (SUNY)

Pre-Environmental Science and Forestry

This program is designed for those students who ultimately desire a B.S. degree in the Environmental Science and Forestry (ESF), which is an upper division/graduate center.

After the first two years of study at Broome Community College, transfers to ESF may apply to a variety of programs at Syracuse which may include the **biological sciences** (botany and forest pathology, entomology, zoology, wildlife biology, silvics, pest management); **chemistry** (natural and synthetic polymers, biochemistry and natural products, environmental); **forest engineering, paper science and engineering; wood products engineering; and forestry** (resource management, forest resource science, management science, environmental forestry, applied resource management). The program in **landscape architecture** leads to a B.S. degree in environmental studies and, after one additional year, a Bachelor of Landscape Architecture degree.

Persons planning to transfer should follow the program requirements in consultation with BCC's Pre-Environmental Science and Forestry campus advisor for selection of electives which may vary according to the curriculum at ESF.

Successful graduates of Broome Community College's Pre-Environmental Science and Forestry Program generally gain admission to the SUNY College of Environmental Science and Forestry with full junior class status.

Contact Anthony Lotempio (Science Building, Room 216).

ARTICULATION AGREEMENTS

Broome Community College has special articulation agreements with many 4 year colleges for the purpose of gaining as many transfer credits as possible for BCC graduates who wish to study at those schools after completing their studies at BCC. Students are encouraged to contact their department chairperson, divisional dean or the Counseling and Student Development Center for more information.

GUARANTEED TRANSFER PROGRAM WITH STATE UNIVERSITY OF NEW YORK

Students who graduate from Broome Community College with Associate in Arts or Associate in Science degrees are guaranteed admission at the third-year level, to a four-year college of the State University of New York. This guarantee has some limitations, and details are in the Counseling and Student Development Center (Wales Building, Room 200).

ONE-PLUS-ONE PROGRAMS

Broome Community College has One-Plus-One Programs with other two-year colleges to enable a student to attend BCC for one year and then transfer to the other college for the second year for the Associate in Applied Science degree. This program permits students to begin studying at BCC for a degree in a field not offered at this college. By taking the BCC courses that one needs for the particular degree involved, residents of Broome County can enjoy the advantage of living at home during one year of their college attendance. Students taking these One-Plus-One Programs are Liberal and General Studies students at Broome Community College because most of the courses they take at BCC are Liberal and General Studies courses.

Check with the Liberal and General Studies Office for more information about these programs.

THREE-PLUS-ONE PROGRAM

Broome Community College has a Three Plus One Program with the Department of Nursing at SUNY - Brockport. After completion of the AAS degree in Nursing at Broome Community College, students take additional courses at Broome Community College during the third year. After successfully completing entrance exams, the student is admitted to SUNY - Brockport for completion of the Bachelor of Science in Nursing degree.

SPECIAL TRANSFER PROGRAMS

Broome Community College graduates will be able to transfer to a wide range of baccalaureate programs and institutions. Listed below are some colleges with whom BCC has special arrangements.

Contact the Admissions Office at Broome, the appropriate department chairperson, and/or the transfer counselor in the Counseling and Student Development Center for specific information on course requirements. Many four-year colleges require specific grade point averages for transfer and eligibility.

Association of Engineering Colleges of New York State Engineering Science

Bentley College
Accounting, Computer Information Systems, Economics, Finance, Law, Management, Marketing, Quantitative Analysis

Clarkson University
School of Management

College of St. Rose
All AA, AS degree

Cornell University (College of Human Ecology)
Human Development and Family Studies

Fairleigh Dickinson University
AAS Degree in Civil, Electrical, Mechanical Engineering Technology

LeMoyne College
Any baccalaureate degree program with AA or AS in Liberal and General Studies, Business Administration, Engineering Science

Marist College
Parallel programs in Business (Marketing, Management) Accounting, Engineering Technology, (Civil, Electrical, Industrial and Mechanical)

Rochester Institute of Technology
AA, AS, AAS degree

St. John Fisher College
AA, AS degree programs, Liberal and General Studies, Business Administration, Engineering Science

SUNY College at Binghamton
Watson School of Engineering, Harpur College, School of Nursing

SUNY College at Brockport
Nursing, Business Administration, Criminal Justice, Liberal and General Studies and LGS Mental Health Emphasis degrees will be accepted in Brockport's Recreation and Leisure program and Social Work program



SUNY College At Cortland
Elementary Education, Computer Science

SUNY College of Environmental Science and Forestry
Biological Sciences
Chemistry
Construction Option (Civil)
Landscape Architecture
Forest Engineering
Paper Science and Engineering Wood Products

SUNY College at Fredonia
AA degree into Business Administration or Liberal and General Studies or Radio and Television.
AS degree into Math, Physics, AAS in Early Childhood into Early Childhood Education

SUNY College At Oneonta
AAS in Accounting, Marketing, Management, Data Processing, And AS in Computer Science

SUNY College At Oswego
Business Administration
AAS in Vocational - Technical Education

SUNY College at Plattsburgh
Any Associate Degree that leads to a baccalaureate program

SUNY College at Potsdam
Any Associate Degree that leads to a baccalaureate program

SUNY College at Purchase
AA, AS degree programs in Liberal and General Studies

SUNY College of Technology (Utica)
AAS in Business, Electrical, Civil and Mechanical Engineering Technology, Industrial Technology, Nursing.
AS in Computer Science, Engineering Science, Liberal and General Studies.
AA in Liberal and General Studies.

Syracuse University
School of Management, Engineering Science

Trinity College
AA, AS, AAS degrees, concentrates on Liberal and General Studies, Sciences, Business
Administration, Engineering Science

SUNY Health Science Center at Syracuse
Cytotechnology, Medical Technology, Physical Therapy

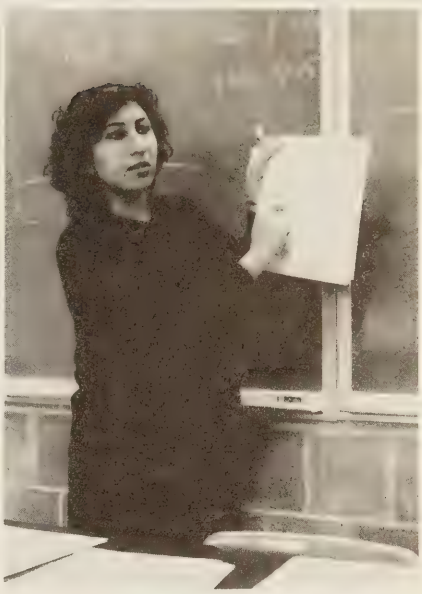
Utica College of Syracuse University
AA, AS graduates in following concentrations - Liberal and General Studies, Business Administration, Engineering Science

Waynesburg College
AS degree graduates accepted, transfer credits determined on individual basis

West Virginia University
Dental Hygiene

Wilkes College
Accounting, Business Administration, Computer Science, Engineering Science, Liberal and General Studies, Nursing

Roger Williams College
AS degree graduates accepted. Transfer credit determined on individual basis



ACADEMIC REGULATIONS

GRADING INFORMATION

Because this grading policy went into effect for the Fall Semester of 1979, grades earned by students at the college prior to that date will remain as recorded.

Grades	Honor Points Per	Explanation
A	4	Outstanding achievement of course objectives
B	3	Significant achievement
C	2	Satisfactory achievement
D	1	Minimal satisfactory achievement
F	0	Failure to meet course objectives or dropped after 10th week
S	-	Satisfactory
U	-	Unsatisfactory
W	-	Withdrawn from a course between the 5th and 10th weeks inclusive (See "W" Grade below)
I	-	Incomplete due to special circumstances (See "I" Grade next column)
IP	-	"In Progress"-for courses in which student is permitted more than one semester to complete.
AU	-	Audit
T	-	Transfer credit from an accredited college

"S", "U" AND "IP" GRADES

The S or U grade and IP grade will apply only to specific courses determined by the appropriate departments and approved by the Vice-President for Academic Affairs. Such courses will not affect the Grade Point Average (GPA).

"W" GRADE

It is the student's responsibility to initiate action to receive a grade of W between the 5th and 10th weeks inclusive. If no action is taken before the 11th week and the course is dropped, an F (or U) will be entered on the transcript. For less than full semester courses, a proportional time to withdraw with a "W" grade will be determined. For example, 7 ½ week courses, an F (or U) will be entered on the transcript if the course is dropped after the 5th week. For 5-week modules an F (or U) will be entered on the transcript if the module is dropped after the 17th class. Students who withdraw from a class may not continue to attend that class.

"I" INCOMPLETE GRADE

A student who receives an I grade shall, within two weeks after the last class of that semester, contact his or her instructor to arrange for completion of unfinished work, in accordance with agreed upon time limits that are not to exceed one year. The instructor will then notify the registrar of the arrangements and after the student has completed the work, of the subsequent grade to be assigned. If the student does not meet the time limit, the instructor shall direct the registrar to record the appropriate grade.

If the student does not contact the instructor during the two-week period at the end of the semester, the registrar shall record the appropriate grade as directed by the instructor.

AUDIT

The term "Audit" shall not be considered a grade but and "opportunity." For persons auditing a course, the letters AU will appear next to the course name on the transcript with a message statement explaining the meaning of the designation. (No grade shall appear in the grade column on the transcript.)

Students are encouraged to use the option of taking courses on an audit basis. A student may not receive credit for it later, unless he/she re-registers in the courses or challenges it according to the existing rules for credit-by examination.

Students who register in a course for audit are expected to have the necessary prerequisites: In this respect students are encouraged to make full use of the College's counseling services, but the ultimate decision whether or not to enroll for audit shall be the student's responsibility. Consideration may be given to a student's request for transfer from credit to audit status or vice versa. The end of the third week of classes is the deadline for such transfer.

Full-time students may audit courses with no additional charge, but they need approval of their department chairperson. **For part-time students,** the regular tuition schedule applies (see page 16). New York State residents who are **60 years of age or older** may audit courses without charge on a space available basis.

REPEATING COURSES

If a course is repeated, the higher grade will enter the cumulative grade point average. If a required course is failed, the department or the dean may allow the student to substitute an equivalent or similar course, rather than repeat the failed course. In such cases the higher grade will enter the cumulative grade point average. All grades will appear on student's transcript.

GRADE POINT AVERAGE

Each grade carries a specified number of honor points - 4 for an A, 3 for a B, 2 for a C, 1 for a D. To determine one's grade point average, multiply the number of honor points earned, according to the letter grade, by the number of credits for the course. Add these together and divide the sum by the total number of credits taken.

For purposes of graduation eligibility, only those courses required for the degree will be included in the calculation of the grade point average (GPA).

The GPA is fixed as of graduation and any courses taken after that will not change the graduation GPA and will not be entered into the previous GPA in any way. Cumulative GPA will reflect all courses that are not starred on the transcript.

PRESIDENT'S LIST AND DEAN'S LIST

Full-time students who have a semester grade point average 3.80 or better will be named to the President's List. Such students must successfully complete a minimum of 12 credit hours. Courses which use the S or U or credit equivalent grade may not be among the 12 hours.

Full-time students who have a semester grade point average between 3.50 and 3.79 inclusive will be named to the Dean's List. Such student must successfully complete a minimum of 12 credit hours. Courses which use the S or U or credit equivalent grade may not be among the 12 hours.

Part-time students can earn a place on the President's or Dean's List by having the appropriate cumulative grade point average for their most recent semesters that include at least 12 credit hours. Courses which use the S or U credit equivalent grade may not be among the 12 hours. Part-time students should contact the Registrar's Office if they have the appropriate grade.

GRADUATION WITH HIGH HONORS OR HONORS

Students who graduate with a cumulative grade point average of 3.80 or better will receive the distinction of graduating with "High Honors" and those who graduate with a cumulative grade point average between 3.50 and 3.79 inclusive will graduate "with Honors."

CREDIT EQUIVALENT

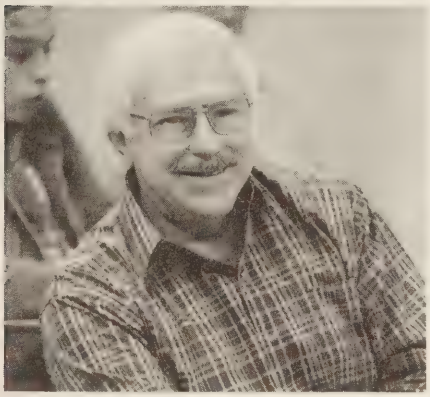
Some courses at Broome Community College carry "credit equivalents." This means that they do not give a student credit toward a degree at the college, but they are equivalent to the appropriate number of credits for one's academic load. This credit load is used, to cite some examples, for determining a student's status as full-time or part-time, for financial aid, for billing, and for academic standing. Four courses carry these equivalent credits for the 1988-89 college year - ENG 090 Basic Language Skills, MAT 090 Basic Mathematics Review, RDG 090 Reading Fundamentals, RDG 092 College Preparatory Reading.

RETENTION

The college has begun a study to determine how many of its students eventually graduate either from Broome or other colleges to which they transfer.

Early indications show that the number of students completing academic programs at Broome is steadily rising. In recent years, the graduation rate is estimated to have exceeded 50%, covering all programs. In some fields, especially the engineering technologies, the graduation rate appears to be greater, reaching as high as 65% to 70% of the entering class.

Another survey of students receiving financial aid was completed in Spring 1984 and indicated even more positive outcomes, with 65% of students graduating from all programs.



POLICY OF STANDARDS FOR ACADEMIC PROGRESS

In order to be in good academic standing and to be making academic progress toward a degree or certificate, a student must meet a minimum cumulative grade point average and successfully accumulate credits according to the following standards:

1) GRADE POINT AVERAGE

Credits Attempted	Minimum Cumulative GPA
0-20	1.50
21-40	1.75
41-upward	2.00

2) SUCCESSFUL ACCUMULATION OF CREDITS

Students must successfully pass ("D" grade or better) a total number of credits according to the following standard:

Credits Attempted	Credits Completed
20	12
40	24
60	36
80	48
100	60

By the time a student has attempted 20 credits, he/she must have successfully completed 12 credits. Likewise, 40 credits trigger the 24 credit minimum requirement.

PROBATION

Student's records will be reviewed at the end of each semester. Students who have not met the minimum standards will be placed on probation. A student will have one semester to achieve the minimum standards before facing dismissal. During this probationary time, the student is expected to remain in contact with his/her advisor, department chairperson or division dean.

CONTINUED PROBATION: If a student achieves a 2.00 semester grade point average and satisfies the accumulation of credits requirement while on probation, but fails to meet the required minimum cumulative GPA, he/she will be given an additional semester of probation. Probation will continue as long as the student continues to achieve a semester grade point average of at least 2.00.

DISMISSAL: If a student does not meet the minimum standards during the probationary semester, the student will be dismissed from the College after the probationary semester.

DISMISSAL REVIEW: Verified medical, psychological or personal reasons directly contributing to the student's academic failure may be considered by the divisional dean for a waiver of dismissal. In addition, the dean may reinstate students at his/her discretion based on recent dramatic improvements in performance but which still leave a student with cumulative credit or GPA deficiencies. This requires a petition to the dean.

A student may receive only one waiver of dismissal during his/her enrollment at the College for the above reasons. The student will remain on probation after receiving a waiver and will be expected to obtain a 2.00 semester grade point average. Failure to obtain a 2.00 GPA will result in academic dismissal.

PART-TIME ENROLLMENT: If a student cannot present sufficient information to be granted a one-time waiver, they may continue in the next semester on a part-time basis by petitioning their Divisional Dean. The intent of allowing such part-time enrollment in an approved course of study is to allow the student the opportunity to complete a successful semester. Although allowed to continue in his/her program, the student is not in good academic standing and may not qualify for financial aid assistance. The decision to allow a student to remain on part-time enrollment is at the discretion of the Divisional Dean. The student will remain on probation and will be expected to obtain a 2.00 semester grade point average.

LEAVE OF ABSENCE AND READMISSION: The Divisional Dean may recommend that the student refrain from registering for one full academic semester (Fall or Spring). After an absence of one full semester, the student may apply for readmission to the College as a part-time student. If readmitted, the student will be limited to part-time study. To regain good Academic Standing the student must attain a 2.0 semester GPA (at least a "C" in two courses; 5 to 9 credit hours and/or credit equivalents). The student must apply for readmission through the Office of Admissions and the courses must be approved by the Divisional Dean or Department Chair of the program in which the student is applying for readmission.

RETURN TO FULL-TIME STATUS: A readmitted part-time student who successfully obtains a 2.0 semester average in courses approved by the Dean will be allowed to return to full-time status in the subsequent semester. The student will, however, remain on probation until the cumulative GPA and credit accumulation standards have been met.

DISMISSAL, READMITTANCE FOR DEGREE PROGRAMS

A student must demonstrate discernible progress toward the achievement of a degree in a given program of study. If a student fails one or more introductory courses in a major sequence, as determined by the department, he/she may be dismissed by the department from that program of study-but not necessarily from the college.

To be considered for readmission to the program the student must meet with the appropriate department chairperson who will make the determination. Students must also meet with a counselor prior to being readmitted so that a program of assistance may by established by the counselor. The signature of the counselor must be on the petition form for readmittance. In the case of programs that have limited space for freshmen, the Admission Office shall notify the student of his/her readmittance into the program and adjust accordingly the number of spaces available for new freshmen. A maximum of 10% of the total number of available spaces for freshmen in a program may be used for readmitted students.

This policy applies to the following 11 programs - Dental Hygiene, Engineering Science, Medical Assisting, Medical Laboratory Technology, Nursing, the Office Technologies curriculums of Executive Secretary, Office Services Assistant, Word Processing and Office Technologies Certificate, Radiologic Technology.

ATTENDANCE REGULATIONS

Colleges throughout the nation have found that students who regularly attend classes have a better success record than students who do not regularly attend classes. With the intent of encouraging student success, B.C.C. strongly urges students to regularly attend their classes. In fact, the College's policy is that a student is expected to come to all class sessions prepared to participate in an appropriate manner. Absence from class is considered a serious matter and never excuses a student from classwork. A student must complete all assignments, examinations, and other requirements of any course to receive credit.

The college understands, however, that students sometimes through uncontrollable circumstances, are absent from classes. In these cases, the students need to meet with their instructors to discuss missed work.

SPECIFIC RESPONSIBILITIES

Student Responsibility: Class attendance is a measurable commitment by the student toward meeting individual responsibility for his/her own education. Should a student miss a class, it is the student's responsibility to make up any work regardless of reason for absence. Students should work with the instructor and/or the Counseling and Student Development Center to help resolve reasons for absences.

Instructor Responsibility: Each instructor is responsible for relating the significance of attendance to the course objectives and to inform the students of this significance in the first class meeting. When absences occur, instructors are encouraged to discuss reasons with the student. If the reasons are beyond the student's control, instructors are encouraged to discuss with the student ways to solve the problem, including referral to the Counseling and Student Development Center.

Department Responsibility: Within the spirit and framework of college policy, each department may develop its own guidelines to meet its needs. Such guidelines are subject to the approval of the Vice-President for Academic Affairs.

NOTE: Some developmental courses have strict attendance requirements, whereby students may be de-registered from the class for poor attendance. This de-registration may result in a loss of financial aid. The consequences of this may necessitate that the student return financial aid monies to the college. Consult course outline and/or instructor for further details.

DEREGISTRATION FOR NON-ATTENDANCE

The college reserves the right to administratively deregister a student for a course(s) based on lack of attendance as reported by the instructor of the course on the Official Section Attendance Sheet. Students who have never attended the section or have not attended after the census date (first day of the fourth week of classes for full-term courses) will be deregistered from the course by the Registrar's Office and notified of this action which may result in a loss of financial aid.

STUDENT CHEATING

An instructor has the prerogative of failing a student who has cheated on an exam, quiz, paper, project, report, etc. for that exercise only. Students who cheat a second time risk failure for the entire course and additional disciplinary action, including the possibility of dismissal from college.

STUDENT ACADEMIC APPEAL PROCEDURE

Broome Community College has established a procedure to provide students an opportunity to appeal grades in any particular course(s) or academic dismissal. Copies of the Student Academic Appeal procedure are available in the offices of the Divisional Deans, and the policy also appears in the Student Handbook.

WITHDRAWAL FROM THE COLLEGE

Broome Community College has committed itself to a philosophy of providing whatever assistance is necessary to aid the student in completing his/her academic goals. Students are strongly encouraged to seek academic and personal counseling prior to any withdrawal.

Students who decide to withdraw from the college must obtain a signed drop form from their department and complete a withdrawal form. The withdrawal form is available in the Counseling Center. Failure to comply may cause the individual to lose any possible refund fees.

LENGTH OF CURRICULUM

Most associate degree programs are designed to be completed in two years. The college year is divided into two semesters of 15 weeks each plus an evaluation week. Some students may choose or be required to take more than four semesters to earn their degrees. Radiologic Technology students, for example, have special clinical laboratory experiences in the summer of both their freshman and senior years.

LATE REGISTRATION POLICY

Late registration for credit courses will be permitted through the Friday of the first week of classes (each semester/summer term). To be registered is distinct from changing a student's course schedule through the drop/add process.

WITHHOLDING OF GRADES

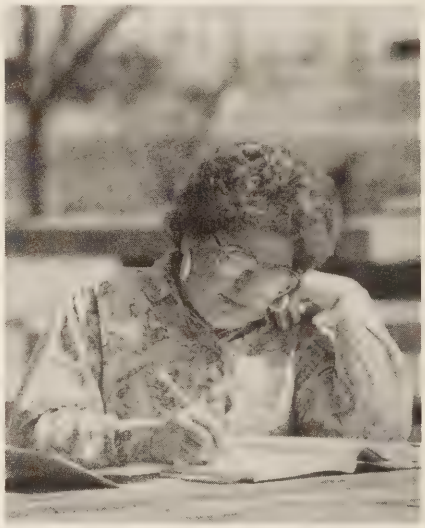
Student's Grades and Official College Transcripts will be withheld if there are outstanding financial or property-returning obligations. These could be to such college offices as Security, Learning Resource Center (Library), Student Accounts, Physical Education, as well as others. Students must settle any such outstanding debts to the college and then present evidence of the settlement to the Office of the Registrar, after which their grades will be distributed.

INDEPENDENT STUDY

Many academic departments of the College offer "Independent Study" courses which are arranged between an individual faculty member and a motivated student. The student has the responsibility to make appropriate arrangements with a faculty mentor and to secure the permission of the department chairperson before registering for independent study.

A student may not take more than one Independent Study course per semester.

Independent Study courses are not intended to replace regular courses which the student was unable to schedule or which he/she did not complete. Rather, these courses provide an opportunity for the serious student who desires to expand his academic background beyond the scope and the depth usually found in a regular course. (See course description section for offerings.)



DECLARATION OF GRADUATION CANDIDACY

Students intending to complete all degree requirements within a given semester are required to declare their intention to do so by filing a Request for Graduation Checkout with the Office of the Registrar. This form can be obtained from the Registrar's Office and must be submitted by the declaration date announced (generally the beginning of the term).

GRADUATION

Broome Community College will conduct one formal graduation ceremony each year in the spring. All candidates for degrees may participate in the ceremony. A candidate is a student who will complete his/her degree requirements at the conclusion of the spring or summer semester. Candidates must have declared their intention to graduate and have been recommended as candidates by the Chairperson of Academic Department. Students who complete their degree requirements at the end of the fall semester will be invited to attend the next graduation ceremony.

ABSENCE DUE TO RELIGIOUS BELIEFS

Section 224-a of the State Education Law reads:

1. No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he is unable, because of his religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days.

2. Any student in an institution of higher education who is unable, because of his religious beliefs, to attend classes on a particular day or days, be excused from any examination or any study or work requirements.

3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which he may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.

4. If classes, examination, study or work requirements are held on Friday after 4 p.m. or on Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study or work requirements held on other days.

5. In effectuating the provisions of the section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section.

6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of his rights under this section .

6-a. A copy of this section shall be published by each institution of higher education in the catalog of such institution containing the listing of available courses.

7. As used in this section, the term "institution of higher education" shall mean schools under the control of the Board of Trustees of the State University of New York or of the Board of Higher Education of the City of New York or any community college.

PROGRAM-IDENTIFYING NUMBERS

State regulations require a listing of all curriculums, together with the degrees they lead to and their HEGIS code numbers. HEGIS stands for Higher Education General Information Survey, and the HEGIS numbers for each curriculum are official federal and state designations. Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain aid awards.

HEGIS	Degree	Curriculum
5001	CERT	Business Skills
5002	AAS	BUS-Accounting
0506	AS	BUS-Business Administration
5004	AAS	BUS-Marketing Management & Sales
5005	CERT	Office Technologies
5005	AAS	BUS-Secretarial Science-Word Processing
5005	AAS	BUS-Secretarial Science-Executive
5005	AAS	BUS-Secretarial Sciences, Office Services Assistant
0508	AAS	Hotel and Restaurant Technologies
5008	AS	Communication and Media Arts
5012	CERT	Interior Design
5099	CERT	Paralegal Assistant
5099	AAS	Paralegal
5099	AAS	Travel and Tourism
5101	AS	Computer Science
5101	AAS	Data Processing
5104	AAS	Computer Technology
5203	AAS	Dental Hygiene
5205	AAS	Medical Laboratory Technology
5207	AAS	Radiologic Technology
5208	AAS	Undergraduate Nursing
5213	AAS	Medical Record Technology
5214	AAS	Medical Assistant
5305	AAS	Chemical Engineering Technology
5309	AAS	Civil Engineering Technology
5310	AAS	Electrical Engineering Technology
5312	CERT	Industrial Technology
5312	CERT	Industrial Technology - Industrial Safety & Ocupational Hygiene
5312	CERT	Machinist Related Instruction
5312	AAS	Industrial Technology
5312	AAS	Industrial Technology - Industrial Safety & Occupational Hygiene
5312	AOS	Tool and Die Making
5315	AAS	Mechanical Engineering Technology
5404	CERT	Dietary Manager
5503	CERT	Child Care
5503	AAS	Child Care
5505	CERT	Criminal Justice
5505	AAS	Criminal Justice - Police
5507	CERT	Fire Protection Technology
5507	AAS	Fire Protection Technology
0901	AS	Engineering Science
4901	CERT	Liberal and General Studies
4901	AS	Liberal and General Studies
4901	AA	Liberaland General Studies
4901	AS	Individual Studies
4901	AAS	Individual Studies

NOTE-"CERT" means certificate, not a degree.



LEARNING ASSISTANCE CENTER

Department Chairperson, Steven Natale
1st Floor Cecil C. Tyrell
Learning Resource Center
Telephone 771-5038

Students entering college may not have the appropriate preparation for the Associate Degree they seek - for example, when a person changes careers, returns to school after several years, or needs to upgrade particular academic skills.

BCC's Learning Assistance Center is committed to helping students realize their goals regardless of prior academic preparation. The Center has courses and activities available for students and works closely with the Admissions and Financial Aid Offices, The Counseling and Student Development Center and Educational Opportunity Program personnel to provide a supportive environment for learning.

DIAGNOSTIC TESTING—The Learning Assistance Center administers three tests to every entering full-time student-in reading, writing and mathematics. Part-time students are also encouraged to take these tests.

COURSE PLACEMENT—The Learning Assistance Center uses the information gained from these tests to recommend and, in some cases require students to take developmental courses that are most appropriate to his/her program of study. Every effort is made to place students in courses in which they can succeed. Students with serious deficiencies will be required to enroll in appropriate non-credit courses.

DEVELOPMENTAL COURSES—Various courses are offered through the Center for those desiring skill improvement or review. Some of these carry credit; others do not. The non-credit courses listed below prepare students for credit level work in the basic skill areas of mathematics, writing and reading. These non-credit courses are equivalent in time to credit bearing classes and are applicable toward financial aid and athletic eligibility.

	Courses	Credit or Equivalent	Catalog Page
ENG 090	Basic Language Skills	0 or 3	106
MAT 090	Basic Math Review	0 or 3	111
RDG 090	Reading Fundamentals	0 or 3	125
RDG 092	College Prep Reading	0 or 3	125
RDG 094	College Vocab Skills	0 or 2	125

NOTE: ENG 090 MAT 090, RDG 090, RDG 092, RDG 094 have strict attendance requirements, whereby students may be de-registered from the class for poor attendance. This de-registration may result in a loss of financial aid. Consult course outline and/or instructor for further details.

Other developmental courses maybe credit bearing. Students should pay close attention to catalog information pertaining to these courses and should consult their department chairpersons or Learning Assistance personnel about the acceptability of credit in a particular degree program.

	Courses	Credit or Equivalent	Catalog Page
BIO 102	Preparatory Biology	4	90
CHM 102	Preparatory Chemistry	4	93
LRS 101	Study Management	.5	125
LRS 102	Memory and Exams	.5	126
LRS 103	Textbook Mastery	.5	126
LRS 104	Listening and Notetaking	.5	126
LRS 105	Learning Skills	2	126
LRS 120	The Art of Thinking	1	126
LRS 130	Intro to Microcomputers and Word Processing	2	126
LRS 140	Intro to Dental Hygiene	0 or 2	126
PHY 100	Preparatory Physics I	4	123
SAC	Human Development Courses	2-3	109

MATHEMATICS LAB

Tutorial instruction is provided to students experiencing difficulty with their math courses at the college. Students may use the Math Lab on a drop-in basis five days and four evenings during the week. A staff of both professional and peer tutors is available to work with students individually, assisting with difficult concepts encountered ranging from basic arithmetic through calculus. In addition, small group tutoring with a professional tutor is offered twice a week for specific courses determined each semester.

READING AND STUDY SKILLS LAB

Professional reading teachers are available in the Reading and Study Skills Lab to assist all students in improving their reading or in mastering the art of studying efficiently and effectively. Students may choose to work with a study skills specialist or to work independently on multi-media programs on such topics as efficient time management, effective notetaking techniques, reading and remembering textbook material, or improving performance on exams. Computer programs on vocabulary improvement and speed reading are also available. Instruction is arranged by appointment according to the student's schedule.

WRITING CENTER

At the Writing Center, professional tutors work individually with students writing for courses across the curriculum. Help is available to all writers -beginning and advanced -at every stage of the writing process, from generating ideas to editing and proofreading. For students who wish to work independently, the Center has many materials for self-instruction, including books, writing guides, slide and tape programs, and computer software. Special topics such as research papers and essay exams are addressed in college-wide workshops offered by the Center each semester. The workshops are among the activities through which the Center nurtures students' interest in and proficiency at various types of writing. Creative writers can join the Writers Forum, a group organized by the Writing Center and the English Department to provide students, faculty, and community members the opportunity to talk about writerly concerns and share works in progress.

PEER TUTORING

The Faculty-Student Association and the Student Support Services Program fund a peer tutoring program, which offers one to one or small group instruction to any student experiencing difficulty with a course. Tutoring takes place in the Learning Assistance Center, and tutors are trained and supervised by the Program Coordinator.

The Center is open from 8:30 a.m. to 8:00 p.m. Monday through Thursday, and from 8:30 a.m. until 4:00 p.m. on Friday. Detailed brochures describing the various programs are available at the reception desk at the Center or you may call 771-5038 for information.

SUPPORT SERVICES FOR DISABLED STUDENTS

Coordinator - Bruce Pomeroy
Student Support Services Program
Library, Room 101
Telephone 771-5210 TDD/TTY 771-5234

In addition to regular student services on campus disabled students entering college may receive special assistance. The Office for the Disabled provides these students additional help in achieving their educational goals.

Such services as interpreters, readers and notetakers are available, and adjustments for program accessibility like re-scheduling classes and elevator use are also arranged. Through the Student Support Services Office in the Learning Assistance Center, students may obtain and use various aids including the Visualtek Machine, light magnifiers, tape recorders, projectors, large print reading materials and taped books.

Broome Community College is committed to meeting the support needs of its disabled students. However, auxiliary services such as notetakers, taped books, and special testing provisions require advanced planning to be implemented as smoothly as possible. The College urges any student who has need of educational support services to give the Coordinator for Disabled Students Services as much advanced notice as possible. This will allow Broome Community College to have quality support services in place at time of the student's needs. Phone 771-5234 (TTY), or write Student Support Services c/o Broome Community College.

In order to avoid the duplication of services and to assure that disabled students at Broome Community College receive all the auxiliary aids for which they qualify as speedily and as efficiently as possible, the College requires that any disabled student who is to receive college assistance attempt to enroll with appropriate federal and state agencies (e.g. the Office of Vocational Rehabilitation and the Veteran's Education Assistance Agency). The Coordinator for Disabled Students Services is available to assist any student who requests in applying to state and federal agencies.

STUDENT SUPPORT SERVICES PROGRAM

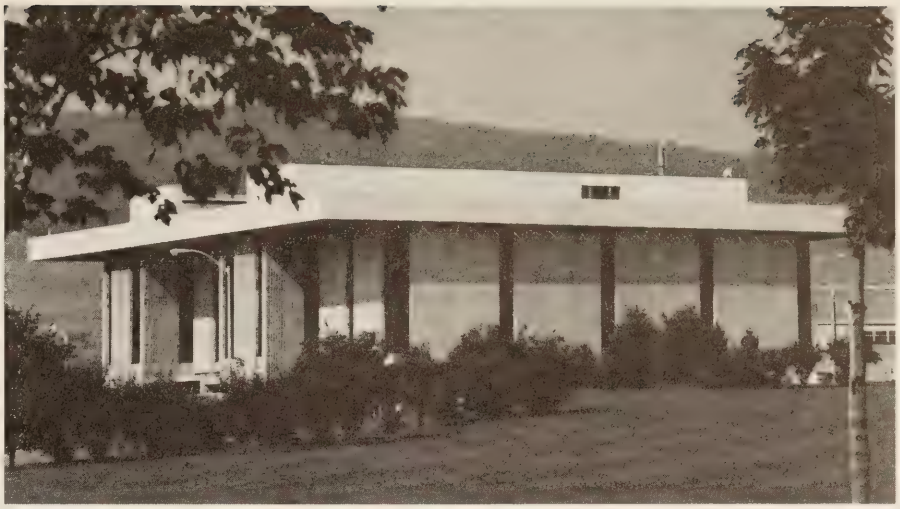
With an open door admissions policy, Broome attracts many students with varied needs. The Student Support Services Program provides assistance to a percentage of these students who have experienced difficulty in achieving academic success. The program is aligned under the Academic Affairs Division and works closely with the Learning Assistance Center.

The Student Support Services Program provides a variety of support services to students who qualify. These services include: academic advisement, tutorial assistance, diagnostic test interpretation, transfer information, referrals, notetaking and reading services for the handicapped, a peer counseling program, and other student services.

The office is located in the library, room 101, and is open from 8 a.m. to 5 p.m. Phone number 771-5234 (TTY).

TDD/TTY TELEPHONES

TDD/TTY telephone units are available in many campus offices: The Student Support Services Office (771-5239), Counseling and Student Development Center (771-5210), Admissions (771-5001), Student Accounts (771-5230), Registrar's Office (771-5027), and The Little Theater (771-5191).



THE CECIL C. TYRRELL LEARNING RESOURCES CENTER

The Cecil C. Tyrrell Learning Resources Center provides a wide variety of learning resources. Housed in the center are the Library, the Audio Visual Department, the Learning Assistance Center, and various specialized learning laboratories, as well as offices and classrooms.

A staff of professional, technical and clerical specialists offers the students a broad range of services designed to meet their academic needs. Typical library services include lending of materials, information services, access to other learning resource centers, interlibrary loan service, assistance in research techniques, and instruction in the use of materials and equipment. A coin operated photocopier is also available.

The learning Resources Center's primary function is to support and supplement the academic programs of the college and to provide a center for serious study, research and learning. Requests for assistance are welcomed by the staff.

The facilities have a capacity of nearly 800 users. Individual carrels, lounge furniture, multiple person tables and stools, and small group study rooms are available. Audio-Visual equipment including projectors, tape and record players, micro-film reader/printers, as well as more specialized machines, are located in the center for student use. Some typewriters and equipment for students with vision disabilities are also available.

The Learning Resources Center was constructed in 1967-68 and named for the College's founding president in 1972, the year he retired after 26 years in the position. The building is an attractive and modern three-story structure, with more than 40,000 square feet of space devoted to its learning facilities.

The Learning Resource Center collections offer many different types of print and nonprint materials carefully selected to meet the academic needs of students at college level. The print collections consist of nearly 70,000 books, 650 current periodicals and serials, plus over 10,000 pamphlets.

More than 3,000 audio recordings, slides, filmstrips, maps, microfilms, multimedia kits, and other types of media add several thousand more items to the collection. An extensive file of college catalogs is maintained.

Most materials including magazines may be borrowed for use outside the center, although some restrictions are placed on reference and reserve materials. The basic loan period for books is four weeks, and for magazines and video tapes, one week.

Some loan periods may be extended if requested before the date materials are due back in the center and the item is not in demand. Overdue fines are not charged as a rule, but the college reserves the right to do so with proper notification.

Library cards will be issued to students upon request and are required for borrowing materials. Proper identification is necessary to obtain a library card. Failure to return borrowed materials promptly upon notice can result in withholding of grades, transcripts and other services.

Lost and damaged materials mut be replaced or paid for at current replacement costs, and the borrower is responsible for all materials charged out on his/her card.

The center is open for full service during the following hours:

Fall and Spring Semesters
Monday-Thursday 8 am to 10 pm
Friday 8 am to 5 pm
Saturday 12 noon to 5 pm
Sunday 4 pm to 10 pm

Holiday and Intersession
Monday-Friday 8 am to 5 pm

Summer Session
Monday-Thursday 8 am to 10 pm
Friday 8 am to 5 pm

The center is closed on all days that the College is officially closed.)

STUDENT AFFAIRS

Student affairs at Broome Community College fall within three primary areas of responsibility - student development, student services, and student management.

Student Development responsibilities include counseling, international student affairs, academic advisement, testing, freshman orientation, student activities, intercollegiate athletics, drug abuse education, leadership training, career development, veterans advisement, personal development courses, and transfer advisement.

Student Services cover admissions, financial aid, placement and health services.

Student Management concerns itself with student discipline, rights, responsibilities, judicial system and grievance procedures.

A comprehensive statement outlining the College's code of student conduct and student rights and responsibilities is available in the office of the Vice President for Student Affairs in Room 202 of the Wales Building. Students are welcome to examine it.

EDUCATIONAL OPPORTUNITY PROGRAM (EOP)

The Educational Opportunity Program is designed for students who are economically disadvantaged. It provides economic aid and remedial and developmental assistance, with the amount of financial aid based on need. Students who do not require financial assistance under this program may benefit from the educational services offered by EOP. To be funded by EOP, students must provide appropriate income information, and all students must be New York State residents as this is a state program. The EOP Office at the College is located in Room 111 in the Wales Building.

PACE

The BCC PACE (Public Assistance Comprehensive Employment) Program is a cooperative effort between The Department of Social Services and Broome Community College. It is geared specifically to help men and women with dependent children who are receiving public assistance and wish to return to school for vocational education.

We help students cope with the responsibilities of being both a parent and a student, plus help coordinate child care and transportation needs. Those interested in this program may contact The BCC PACE Program, Room 213 in the Student Affairs Building or call 771-5350.

LIVING ACCOMMODATIONS

The college has no dormitory facility and assumes no responsibility for student housing. As a service to students the Student Activities Office maintains an up-to-date record of housing accommodations which landlords submit as being available. Copies of the housing list may be obtained by contacting the secretary in the Student Activities office located in the Student Union. The listing is neither an approval nor rating by the college, nor will the college become a third party in any arbitration between students and landlords. Housing arrangements must be made directly by students and parents with local landlords.



HEALTH SERVICE

The college provides a Health Service which is available to all students at no additional charge for services rendered on campus.

Professional staff includes a full time nurse practitioner, a physician available two mornings a week for three hours, and one registered nurse on duty during regularly scheduled class periods.

The Health Service is located in the Wales Administration Building, Room 104, and is available 8:30 a.m. to 4:30 p.m., Monday through Friday. All records are confidential, and information will be released only with the written authorization of the student.

SERVICES:

- Treatment of illnesses and injuries.
- Medical emergency care
- Athletic physicals for varsity sports.
- Blood pressure and vision checks.
- Pap tests by appointment.
- Pregnancy Testing.
- Referrals to local physicians, specialists, dentists, clinics, hospitals.
- Allergy injections - medication to be supplied by student.
- Tetanus and PPD-Mantoux injections.
- Birth control information and counseling.
- Diet and weight control.
- Free pamphlets pertaining to various health matters.
- Tests for strep throat, mononucleosis, diabetes, anemia and urinary problems.
- STD detection.
- Health education programs on campus.
- Insurance - Processing of accident insurance claims, as well as information regarding insurance claims, as well as information regarding international student health insurance and optional sickness plan.
- Counseling and assistance with personal academic and health problems with appointment referrals within the college community.
- Monthly Newsletter with timely hints to assist students to assume responsibility for their own health care.

COUNSELING AND STUDENT DEVELOPMENT CENTER

The Counseling and Student Development Center provides many services for students, whether they are enrolled full-time or part-time, day or evening. Specialized counseling is also available for the international, disabled, career undecided and academically dismissed students. All students can meet with counselors in a helpful and informal atmosphere as they seek to develop their potential, form realistic goals, and understand themselves emotionally and intellectually. The Center is equipped to help students:

1. Understand their basic needs in terms of social, vocational and emotional adjustment to the college setting.
2. Establish realistic educational goals and appropriate methods of achieving them.
3. Assess their strengths and weaknesses to enable them to more effectively deal with academic and personal problems.
4. Better understand their role and that of the College in the higher educational process.
5. Obtain information about transfer and career opportunities, as well as assistance with academic problems.
6. Grow in their personal development and determine appropriate values through instruction in human development courses.

The Counseling and Student Development Center, located on the second floor of the Wales Building is staffed by professional counselors. The Center is open from 8 a.m. to 8 p.m., Monday through Thursday, and 8 a.m. to 5 p.m. Friday during the academic year. Students should become acquainted with the Center by stopping in at their convenience or calling 771-5210 for an appointment. A special brochure is available at the Center, giving details about the services.

CAREER AND LIFE PLANNING

Broome Community College offers an opportunity for students to explore interests, strengths and values in both an individual and group setting. Knowing as much as possible about oneself is the first step in understanding goals related to self fulfillment and to the world of work. The Counseling and Student Development Center can help in the process of self-evaluation and has information on career possibilities, audio-visual aids, testing procedures and techniques used in the process of exploring career fields and making career decisions. Counselors work closely with the College's Placement Center staff in offering students a comprehensive approach to career planning.

PERSONAL COUNSELING

Counseling is available for students experiencing social, personal and family concerns. Counselors attempt to help students face problems with an holistic approach. Assistance is given in both direct and indirect ways, by exploring, understanding and dealing with tasks and crises related to the problems being experienced. Counselors may make referrals to appropriate community agencies, if that should be necessary and mutually agreeable. All counseling is strictly confidential.



ACADEMIC COUNSELING

Counselors are available to help students put their academic efforts into the proper perspective by analyzing their study, social and work habits to enable them to utilize their time in the most efficient way.

TESTING

The Counseling and Student Development Center offers students the opportunity to engage in a testing program. When appropriate, it can be arranged for a student to take a variety of tests including personality and interest inventories. Cognitive style mapping is also available to help students better understand their individual learning preferences. The tests can help students develop self awareness and improve their decision-making ability. The Counseling Center also administers the ACT test and other professional career tests.

HUMAN DEVELOPMENT COURSES

Courses are offered which provide students with an opportunity to examine their values, attitudes, beliefs and abilities. The courses also offer an opportunity to learn how these factors affect the quality of relationships with others. In addition, the students examine the challenge and problems of society as they relate to their development. The Career Exploration, Human Potential, and Individual in a Changing Society will be transferable for credit. See page 109 for course descriptions.

ORIENTATION PROGRAM

Although the Office of Student Activities co-ordinates the college wide orientation program, the Counseling and Student Development Center takes an active role for providing a comprehensive orientation program for the freshman, transfer and re-admitted students. Sessions involving familiarization with the campus and the services available and discussion regarding adjustment to college life are coupled with social and cultural activities to make for a meaningful orientation. Orientation takes place prior to and during the acceptance into the College and all information concerning the activities will be mailed to all students prior to the beginning of the Semester.

The staff of the Counseling Center together with the entire division of Student Affairs endorses the concept that a community college environment should facilitate the development of the whole student.

SPECIAL WORKSHOPS AND SEMINARS

The Center offers a variety of workshops and seminars throughout the college year. Those that have been offered cover such topics as relaxation techniques, career exploration, cognitive style mapping, returning to college, and assertiveness training.

PROGRAM FOR PEOPLE OVER 60

Any citizen of New York State who is 60 years of age or more may "audit" courses at Broome Community College without charge, as long as there is space available. In this connection the word "audit" means these students take the course by attending classes and being exposed to all the work given in class and assigned in the text. They do not have to do the homework or take the examinations, however, and they receive no letter grade or college credit.

VETERANS

The Counseling and Student Development Center administers and supervises the Office for Veterans Affairs. Located in the Wales Building (Room 111) the Veterans coordinator assists veterans in their certification for benefits and in those matters related to the Veterans Administration. The Coordinator works closely with the Counseling staff in referring students requiring counseling services.

TDD/TTY TELEPHONES

A TDD/TTY telephone unit is available in the Counseling and Student Development Center to make it accessible for the hearing impaired. The number is 771-5210.

COUNSELING FOR DISABLED STUDENTS

All students, disabled or not, may receive counseling through the Counseling and Student Development Center. In addition, life skills courses are available to help students clarify career and education goals.

Counselors, are also available to discuss problems with drugs, alcohol, school, family, career, education, transfer and personal concerns. For all of these counseling services, students should contact at the Counseling Center, (771-5210). All services at the Counseling Center are confidential. For other issues related to disabilities, please call the Student Support Services Office. (771-5150) (771-5234 TTY)

A TDD/TTY telephone unit is available in the Student Support Services Office and the Counseling and Student Development Center to make them accessible to the hearing impaired. The respective numbers are 771-5234, and 771-5210 (Voice/TDD /TTY).

TRANSFER TO 4-YEAR COLLEGES AND UNIVERSITIES

Broome Community College has developed a fine reputation for its successful preparation of students for study at senior institutions. Students desiring to continue their education are encouraged to consult with a counselor in the Counseling and Student Development Center, their faculty advisor, department chairperson or dean for assistance in selecting a program and/or institution that is appropriate to their goals, abilities and aspirations.

To these ends, the College conducts the Transfer Emphasis Program, which consists of visits to the campus by representatives of four-year schools to recruit and advise potential transfer students. These visits occur each semester, and they are designed to expedite the information process, necessary to insure a smooth transition between community college and various four-year programs. The representatives, generally from admissions offices, discuss life on their campuses, financial assistance possibilities and activities available, in addition to the traditional explanations of all their academic programs.

Applications for the **State University of New York** colleges and university centers are available in the Counseling and Student Development Center. Students should apply directly to all **other colleges** (non-SUNY units) by requesting an application and any other pertinent data from the admissions office of the desired college.

All student should arrange at the BCC Registrar's Office to have copies of their transcripts forwarded to the admissions office of the colleges to which they are applying. This will insure proper transfer of applicable credits. Any requests for references and recommendations may be forwarded to the Counseling and Student Development Center, and all acceptances and rejections of applications should also be reported to the Center.

Any questions or problems regarding transfer should also be directed to the Counseling and Student Development Center. For information on special transfer opportunities, see pages 22 and 23.

PLACEMENT

93% OF 1988 GRADUATES FOUND JOBS OR TRANSFERRED

- **93% of the 1988 Graduates** either found employment or transferred to 4-year colleges, thus enabling BCC to fulfill its two major missions of preparing graduates for immediate employment or transfer to 4-year colleges.
 - 50% of the graduates went to work.
 - 43% transferred to 2 and 4 year colleges or other technical programs.
 - 4% were unemployed at the time of the survey.
 - 3% unavailable for work.
- **Starting Salaries** of those who went to work averaged $16,545 a year and ranged from $7,800 up to $37,440. About 33% reported salary information.
- **911 Graduates in Class of 1988** at Broome Community College, and 91% of them responded to survey. All statistics here are based on that 91% response.
- **Where They Went To Work:**
 79% of those who went to work found jobs in Broome County, with an additional 7% working elsewhere in the Southern Tier. In addition 5% got jobs elsewhere in New York State, and another 8% went outside of the state.
- **Where They Transferred To:**
 - 70% of those who are continuing their higher education transferred to colleges in the State University of New York (SUNY) system.
 - 18% to private colleges in New York State.
 - 12%to out-of-state colleges and universities.
- **Leading Employers, in order:**
 - Large industries in NY State, such as IBM, Link Flight Simulation, Eastman Kodak, Anitec Image, NYSEG Corp., Universal Instruments
 - Hospitals and nursing homes in Broome County
 - Retail stores in Broome County
 - Small to medium industries in Broome County and Southern Tier such as Dover Electronics, CDI Corp., Ozalid, Simmonds Precision, Atlantic Design, Buckingham Manufacturing
 - Day care, educational and non-profit organizations in Broome County
 - Bank, investment, accounting and insurance agencies in Broome County
 - Civil service - city, county, state and federal, including military
 - Contractors, temporary service agencies and job shops
 - Hospitals and nursing homes in Southern Tier and elsewhere in New York State
 - Business firms in Broome County and Southern Tier
 - Dentist offices in Broome County and elsewhere
- **Colleges to which BCC Graduates Transferred in 1988, in order:**
 SUNY Binghamton
 SUC Cortland
 Clarkson University
 SUNY Buffalo
 Rochester Institute of Technology
 SUC Oswego
 SUNY College of Environmental Science & Forestry
 SUC Oneonta
 SUC Brockport
 SUNY College of Technology

Most students who attend Broome Community College will eventually enter the labor market. Getting a job, particularly that first entry level position, requires an understanding of how to contact employers and what job hunting techniques provide the best employment success. The Placement Office not only helps students locate positions but offers assistance in resume writing and interviewing techniques.

The Placement Office lists full-time, part-time and seasonal jobs from employers who want to hire Broome Community College students and alumni. Most of these positions are related to academic programs at the College, and they are of particular value to students wishing to gain experience in their chosen field. The New York State Employment Service "Job Bank" and employment counselor are also available on a daily basis in the Placement Office (Wales Building, Room 201).

The quality of the College's academic programs is well known by many companies both locally and nationally. During the spring semester of every year, representatives of business and industry visit the campus to interview potential graduates for employment purposes. Students wishing information regarding this recruitment program should contact the Placement Office by November 1.

Individual appointments can be made to discuss job market predictions, salary expectations, and other questions related to employment.





Placement Office
Wales Bldg., Room 201
Phone: 771-5205

PLACEMENT FOR CLASS OF 1988

THE ACADEMIC AREAS

BUSINESS—290 graduates, 61% employed, 5% unemployed, 30% transferred, 4% unavailable for work. Salary information - $12,615 average, $9,400 to $18,000 range.

COMPUTER STUDIES—41 graduates, 37% employed, 11% unemployed, 50% transferred, 3% unavailable for work. Salary information - $14,720 average, $10,500 to $18,000 range.

ENGINEERING AND TECHNOLOGY—181 graduates, 35% employed, 3% unemployed, 61% transferred, 1% unavailable for work. Salary information - $18,050 average, $13,000 to $23,920 range.

HEALTH SCIENCES—104 graduates, 87% employed, 3% unemployed, 6% transferred, 4% unavailable for work. Salary information - $19,633 average, $12,100 to $37,440 range.

LIBERAL ARTS—200 graduates, 30% employed, 1% unemployed, 68% transferred, 1% unavailable for work. Salary information - $12,933 average, $9,600 to $18,225 range.

SPECIAL CAREER PROGRAMS—100 graduates, 48% employed, 7% unemployed, 37% transferred, 8% unavailable for work. Salary information - $12,277 average, $7,800 to $20,000 range.

CURRICULUM

Following is a summary of each curriculum of BCC's six academic areas in which there were graduates last year. Percentages are based on number of graduates responding, not total number.

BUSINESS

ACCOUNTING—54 graduates, 62% employed, 6% unemployed, 23% transferred, 9% unavailable for work. Salary information - $12,557 average, $10,400 to $15,000 range.

BUSINESS ADMINISTRATION—78 graduates, 35% employed, 4% unemployed, 61% transferred, 0% unavailable for work. Salary information - $14,250 average, $12,500 to $16,000 range.

ENTREPRENEURSHIP—3 graduates, 67% employed, 0% unemployed, 33% transferred, 0% unavailable for work. Salary information not available.

MANAGEMENT—23 graduates, 55% employed, 9% unemployed, 32% transferred, 5% unavailable for work. Salary information - $14,850 average, $11,700 to $18,000 range.

MARKETING—36 graduates, 64% employed, 9% unemployed, 24% transferred, 3% unavailable for work. Salary information - $11,760 average, $8,840 to $15,000 range.

MARKETING MANAGEMENT—35 graduates, 90% employed, 0% unemployed, 3% transferred, 7% unavailable for work. Salary information - $12,750 average, $12,500 to $13,000 range.

OFFICE TECHNOLOGIES (EXECUTIVE SECRETARY)—30 graduates, 68% employed, 12% unemployed, 12% transferred, 8% unavailable for work. Salary information - $12,123 average, $10,400 to $15,120 range.

OFFICE TECHNOLOGIES (OFFICE SERVICES ASSISTANT)—6 graduates, 100% employed, 0% unemployed, 0% transferred, 0% unavailable for work. Salary information - $11,500 average, $10,000 to $13,000 range.

OFFICE TECHNOLOGIES (WORD PROCESSING)—13 graduates, 92% employed, 0% unemployed, 8% transferred, 0% unavailable for work. Salary information -$12,776 average, $9,400 to $15,600 range.

REAL ESTATE—2 graduates, 100% employed, 0% unemployed, 0% transferred, 0% unavailable for work. Salary information not available.

TRAVEL AND TOURISM—10 graduates, 67% employed, 0% unemployed, 33% transferred, 0% unavailable for work. Salary information not available.

COMPUTER STUDIES

COMPUTER SCIENCE—26 graduates, 28% employed, 12% unemployed, 60% transferred, 0% unavailable for work. Salary information - $14,033 average, $10,500 to $16,000 range.

COMPUTER TECHNOLOGY—7 graduates, 71% employed, 0% unemployed, 29% transferred, 0% unavailable for work. Salary information not available.

DATA PROCESSING—8 graduates, 33% employed, 17% unemployed, 33% transferred, 17% unavailable for work. Salary information not available.

HEALTH SCIENCES

DENTAL HYGIENE—22 graduates, 90% employed, 5% transferred, 5% unavailable for work. Salary information - $22,529 average, $15,600 to $37,440 range.

MEDICAL ASSISTING—10 graduates, 80% employed, 20% unemployed, 0% transferred, 0% unavailable for work. Salary information - $13,000 average, $12,480 to $13,520 range.

MEDICAL LABORATORY TECHNOLOGY—5 graduates, 100% employed, 0% unemployed, 0% transferred, 0% unavailable for work. Salary information - $17,800 average, $16,600 to $18,700 range.

MEDICAL RECORDS TECHNOLOGY—10 graduates, 70% employed, 0% unemployed, 20% transferred, 10% unavailable for work. Salary information - $13,520 average, $12,100 to $15,000 range.

NURSING—53 graduates, 92% employed, 0% unemployed, 4% transferred, 4% unavailable for work. Salary information - $20,979 average, $18,640 to $30,064 range.

RADIOLOGIC TECHNOLOGY—4 graduates, 75% employed, 0% unemployed, 25% transferred, 0% unavailable for work. Salary information - $16,475 average, $15,850 to $17,100 range.

LIBERAL AND GENERAL STUDIES

ASSOCIATE IN ARTS DEGREE—147 graduates, 30% employed, 0% unemployed, 68% transferred, 2% unavailable for work. Salary information - $13,913 average, $9,600 to $18,225 range.

ASSOCIATE IN SCIENCE DEGREE—12 graduates, 0% employed, 0% unemployed, 100% transferred, 0% unavailable for work. Salary information not available.

COMMUNICATION AND MEDIA ARTS—27 graduates, 41% employed, 0% unemployed, 59% transferred, 0% unavailable for work. Salary information - $12,280 average, $11,400 to $14,000 range.

MENTAL HEALTH EMPHASIS—14 graduates, 31% employed, 8% unemployed, 62% transferred, 0% unavailable for work. Salary information not available.

TECHNOLOGY AND ENGINEERING

CHEMICAL ENGINEERING TECHNOLOGY—17 graduates, 71% employed, 6% unemployed, 12% transferred, 12% unavailable for work. Salary information - $19,317 average, $13,000 to $22,000 range.

CIVIL ENGINEERING TECHNOLOGY—13 graduates, 46% employed, 0% unemployed, 54% transferred, 0% unavailable for work. Salary information not available.

ELECTRICAL ENGINEERING TECHNOLOGY—42 graduates, 48% employed, 5% unemployed, 48% transferred, 0% unavailable for work. Salary information - $17,776 average, $15,000 to $23,920.

ENGINEERING SCIENCE—68 graduates, 2% employed, 0% unemployed, 98% transferred, 0% unavailable for work. Salary information not available.

INDUSTRIAL TECHNOLOGY—13 graduates, 91% employed, 9% unemployed, 0% transferred, 0% unavailable for work. Salary information not available.

MECHANICAL ENGINEERING TECHNOLOGY—25 graduates, 48% employed, 0% unemployed, 52% transferred, 0% unavailable for work. Salary information - $17,529 average, $16,300 to $20,280 range.

SPECIAL CAREER PROGRAMS

CRIMINAL JUSTICE—29 graduates, 33% employed, 7% unemployed, 56% transferred, 4% unavailable for work. Salary information - $12,633 average, $7,800 to $20,000 range.

EARLY CHILDHOOD—23 graduates, 52% employed, 5% unemployed, 24% transferred, 19% unavailable for work. Salary information not available.

FIRE PROTECTION TECHNOLOGY—3 graduate, 100% employed. 0% unemployed, 0% transferred, 0% unavailable for work. Salary information not available.

INDIVIDUAL STUDIES (AAS)—1 graduate, 100% employed, 0% unemployed, 0% transferred, 0% unavailable for work. Salary information not available.

INDIVIDUAL STUDIES (AS)—19 graduates, 20% employed, 7% unemployed, 60% transferred, 13% unavailable for work. Salary information not available.

PARALEGAL ASSISTANT—25 graduates, 74% employed, 11% unemployed, 16% transferred, 0% unavailable for work. Salary information - $11,850 average, $11,700 to $12,000 range.

STUDENT ACTIVITIES

The Student Activities Program at Broome has grown out of a conviction that education is not restricted to scheduled classes, that the hours outside of the classroom are of major importance, and that the Student Activities Program can give an additional dimension to education. This program offers a variety of social, cultural, and intellectual experiences and opportunities for the development of social growth, appreciation, and insights.

In recognizing the existence of this part of college life, the college actively supports a co-curricular activities program that is funded by the student activity fee paid each semester. The Student Activities area represents one phase of campus life in which the students can and do have a voice in management and programming. The diversity of students interests is reflected in the many active clubs and organizations on campus. Involvement in the Student Activities Program provides students with the opportunity to develop leadership abilities.

Credit can be earned for participating in some of these co-curricular activities. Students should check with their advisors for further information concerning these credits.

STUDENT GOVERNMENT ASSOCIATION

The official organization of student representation on the Broome Community College campus is the Student Government Association. Student membership consists of five officers and thirteen senators who are elected annually. The remainder of the senate is comprised of one representative from each of these support areas: Program board, Clubs Council, and Intercollegiate Athletic Advisory Council. All BCC students are welcome to attend meetings and become involved with SGA committees and activities. The SGA holds regularly scheduled meetings to discuss all issues concerning students. These issues are then presented to the appropriate faculty, staff or administrative area. A Student Trustee sits on the College Board of Trustees as a voting member and presents information of student interest to this body.

Student Government Association fulfills many student responsibilities on campus. It regularly reviews college policy and makes recommendations to the College Administration. Representatives of the SGA serve on the Faculty-Student Association. The operation of the student government is important to students and puts students ideas and viewpoints into action.

PROGRAM BOARD

One of the most active organizations on campus is the Program Board. Dances, Theatre, Film, Spring Picnic, noon -hour programs, featuring famous artists and speakers, convocations and cultural events both on and off campus are the products of the programmer's efforts. This board is a voice of the campus in selecting the kinds of entertainment performed. The board is composed of student, faculty, and administrative representatives.

STUDENT CENTER

One of the busiest buildings on the Broome Community College campus is the Student Center. It houses the gymnasium, the College Cafeteria, Book Store, the Little Theater, Physical Education and Athletic Director's offices, and many of the social events are held here. This building is used by day and evening students of all curriculums.

MEDIA BOARD

Fulcrum (campus newspaper) offers a variety of information for the students. It speaks out on important issues, offers the humorous side of student life, and gives the students a chance to voice their opinions through editorials and human interest stories.

Citadel (the yearbook) provides an opportunity for students to work on a more lasting project and to cover the entire college year in words and pictures.

Audio-Media Organization is for students who want to be involved in live broadcasting. WBCR Campus Radio provides an opportunity to learn about the different jobs in radio while working for an actual closed circuit radio station. WBCR provides the college community with music, information and special station-sponsored events. Members learn to be DJ's, to program music, to coordinate a show and to market "airtime."

THE STUDENT UNION

The Student Union is for students to enjoy during their leisure hours on campus away from the books. From eight in the morning until nine in the evening, the Union provides diverse recreational activities. Electronic games, ping pong, pool foosball, and pinball are available for play and relaxation. The Union provides a lounge for playing chess or cards, a video projector for viewing TV, and, of course, vending machines.

CURRICULUM AFFILIATED ORGANIZATIONS

In addition to the student organizations listed above that are affiliated with professional societies, the College has a number of associations that are identified with specific curriculums. Among these are Accounting Club, Chemistry Club, Civil Technology Association, Collegiate Secretaries International, Computer Club, Dental Hygiene Assoc., Medical Assistant Club, Medical Records Club, Citadel (yearbook), Fulcrum (newspaper), Institute of Electrical & Electronics Engineers, Society of Manufacturing Engineers, Student Nurses Assoc., Lively Arts from the Liberal Arts curriculum, and the Student Organization of Radiologic Technologies.



OTHER CLUBS

In addition to the co-curricular activities listed on this page and the next one, other organizations are active on campus. These include:

- Aviation Club
- Chess
- International Students
- Lambda Society
- Men's Volleyball
- Minority Student Union
- Outing Club
- Phi Theta Kappa
- The Adult Student Club
- Ski Club
- Track Club

These are open to all full-time and part-time students. Details are available from the Director of Student Activities.

PERFORMING ARTS

THEATRE/BCC

Complementing the studio and academic course work in theater is the group known as Theatre/BCC. All students are invited to participate, whether or not enrolled in formal course work.

Theatre/BCC enjoys a fine artistic reputation, presenting a broad range of theatrical styles, and provides its actors/technicians with varied opportunities for ensemble as well as individual training. Theatre/BCC provides a challenging and exciting experience for students with an interest in the theater, and most of its productions are performed in the intimate setting of the College's Little Theater.

NOTE: Students may receive transferable credit for active participation in College Choir, the Instrumental Music Association and Theatre/BCC. The conditions for this credit are available from one's advisor.



MUSIC

College Choir is sponsored jointly by the Liberal Arts Division and Student Government Association. Choristers have gained an excellent reputation and are exposed to a broad range of choral literature reflecting the varied demands for community concerts. The chorus traditionally produces an annual performance on Handel's Messiah and an annual Spring Concert, as well as performing for local church and civic organizations. The College Choir makes an annual concert tour to such places as Washington, D.C. or Williamsburg, VA. Rehearsals are held weekly and all students and staff as well as community signers are welcome to join this very active group.

The **Music Association** offers students who have previously played instruments the chance to continue their involvement in small ensembles (brass, woodwind and string) and the College Stage Band. A limited program of private coaching is also available.

BCC Jazz Ensemble offers instrumentalists a chance to perform jazz and jazz-rock on campus, and on tour. Its members strive for high quality performing and the enjoyment of working together toward this goal. A group of eight singers is used for popular arrangements with the band.

Improvisation, beginning and intermediate piano, beginning guitar reading classes are available to BCC students.

The Theater and Music Programs have joined in musical theater productions. Any BCC students who are interested may audition for performance on stage or in the orchestra.

PROFESSIONAL SOCIETY AFFILIATES

Since exposure to organizations in their fields of study is considered of benefit to students, many curriculums have their own affiliates of national professional societies. Among these are:

Society of Manufacturing Engineerings (SME) for Mechanical Engineering Technology students.

Dental Hygiene Association, an affiliate of the American Dental Hygiene Association.

Institute of Electrical and Electronics Engineers (IEEE) for Electrical Engineering Technology students.

In addition, some meetings of local professional societies are attended by students, such as the **American Chemical Society,** which invites Chemical Engineering Technology students to its meetings. Some professional societies hold meetings on campus, too, and students are always welcome to attend. Thus students have the opportunity to become acquainted with professional people in their fields of study and to attend lectures and see films and demonstrations of new developments.

HONOR SOCIETIES

Phi Theta Kappa

In 1962, the Mu Eta Chapter of the Phi Theta Kappa was established at the College. Phi Theta Kappa is a national honor society at two-year colleges, similar in purpose to Phi Beta Kappa at the four-year colleges and universities. Mu Eta Chapter is open to freshman and seniors at Broome CC who have achieved outstanding academic grades.

Sigma Phi Alpha

The national dental hygiene honor society, Sigma Phi Alpha, has a chapter at Broome CC, The Upsilon Chapter. Senior Dental Hygiene students who rank highest in scholarship and who exhibit potential qualities for future growth and attainment are selected for membership.

Tau Alpha Pi

The national honor society for students in engineering technology programs, Tau Alpha Pi has established a chapter on the Broome Community College campus. It is the Beta Theta Chapter. This society recognizes academic achievement in BCC engineering technology curriculums in Electrical, Civil, Chemical and Mechanical Technology.

ATHLETICS

WOMEN'S SPORTS (Intercollegiate)

Broome Community College fields women's teams in five varsity sports - tennis, cross country, volleyball, basketball and softball - and they have achieved some fine success in recent years.

One of the cross country runners participated in the National Tournament in Hutchinson, Kansas in 1983; the tennis team has captured several individual and team regional titles in recent years and participated in the Nationals in 1983 and 1984 in Ocala, FL; after being the runner-up in the Region III Tournament in 1982, the volleyball team captured first place in 1983 and 1984 and played in the Nationals. Furthermore, both the basketball and softball teams have had excellent records in recent years. Cheerleading is also available for women.

MEN'S SPORTS (Intercollegiate)

Broome Community College fields men's teams in eight varsity sports - cross country, soccer, wrestling, basketball, ice hockey, tennis, golf, baseball.

BCC athletic teams have an excellent reputation in two-year college competition. Included in the basketball team's more than 876 victories are 10 regional titles. Former coach Dick Baldwin became one of the first inductees into the National Junior College Basketball Hall of Fame, and he is the winningest college basketball coach in the country. The tennis and baseball teams have also been successful in regional competition, and in 1983 the baseball team was the regional champion.

The golf team has also been a recent Region III winner, capturing the team championship in 1981, 1984 and 1985.

The soccer team too has been good enough in recent years to be invited to post-season competition and the ice hockey team has been ranked in the top five nationally in recent years and has had two junior college All-Americans. Broome's wrestling team produced an "All-American" in the 1987 season.

INTRAMURALS

Physical activity is a vital part of an individual's life, regardless of physical capability. With this in mind, the Student Affairs Division and the Physical Education Department coordinate an intramural program for all students enrolled at the College. Students are invited to participate in team sports such as Touch football, Soccer, Gym hockey, basketball, Volleyball and Softball. For those interested in individual competition or "Play for fun," sports such as tennis, golf, badminton, horseshoes and bowling are also offered. Students participating in intramurals should have a health questionnaire on file with the college Health Service. Forms are available in the Health Service (Wales Building, Room 104).

COLLEGE ENHANCEMENT



BOOK STORE

The College Book Store, or Campus Store as it is sometimes referred to, is located in the Student Center and actually has two areas of operation - The Textbook Store and the Campus Shop.

In the Textbook Store students may purchase their required books. To avoid standing in long lines the first week of classes, students are urged to purchase their books during the advance sale period, which is the week preceding the start of classes in both the fall and spring semester. Books are not available prior to this advance sale period. It is advisable to purchase all required textbooks early in the semester. In addition to the obvious reason of using them for studying, all unsold books must be returned to the publisher shortly after the semester begins.

The Campus Store offers a variety of items, in addition to such classroom supplies as notebooks, paper, pens and binder, there are art and drafting materials, imprinted gift items and sportswear.

Students who have any special problems, suggestions or requests should feel free to contact the store management.

FACULTY-STUDENT ASSOCIATION

The Faculty-Student Association of Broome Community College, Inc., is an educational corporation designed to provide to the College, and particularly to the students and faculty, services that are not included in the regular College budget.

It provides the corporate organization through which the student fees are expended under a budget prepared by the Student Government Association. It also operates a variety of auxiliary services including the College Book Store, food vending and child care.

The FSA earnings augment student fees to support new or special activities. The association is governed by a board of directors elected by members who hold certain offices on campus. The operating philosophy is to make the educational program outside the classroom a well-rounded supplement to the students' academic experiences.

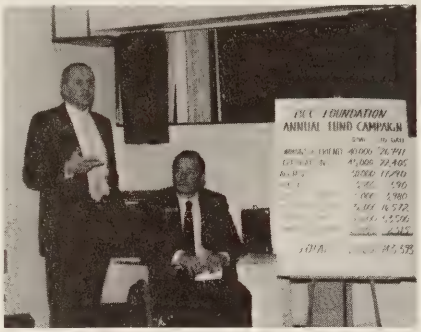
BCC FOUNDATION

The Broome Community College Foundation, Inc, is a not-for-profit corporation that raises private funds to assist BCC students through grants, scholarships, and loans. It also helps students by supplying funds for programs and projects for which public dollars are unavailable or insufficient. Providing faculty development funds to help faculty members attend workshops and seminars and to take graduate courses is an example of the use of these special funds.

The private funds are raised annually from alumni, parents, faculty and staff, community friends, corporations, private foundations, and civic and professional organizations. A staff of seven, which includes the Alumni Affairs Office, design and implement the development program. These professionals are joined by about 150 community volunteers to make this effort on behalf of BCC and its students successful. The annual Alumni Phonathon is a part of this effort.

Besides the annual campaign, the Foundation has raised and manages an endowment of about $2.6 million. Major gifts made through wills or as living endowed funds make up the bulk of the endowment. The income from these investments enhance various programs supported by the Foundation, depending on restrictions made by donors.

In addition to accepting direct cash gifts, the Foundation serves as the administrative conduit for all in-kind gifts to the College. Equipment, books and works of art are examples of material received by the College through the Foundation. All gifts to the Foundation, whether cash, securities or material, are tax deductible.



ALUMNI

The Broome Community College Alumni Association provides the link between the College and its alumni. Any former student may become a member by paying the modest lifetime dues of $25.

The Office of Alumni Affairs, which is located in the Wales Building (Room 107) serves as a liaison between the College, its faculty, administration and 22,000 alumni. The office coordinates the total alumni effort and works closely with the Alumni association Board of Directors.

Membership in the Alumni Association gives alumni the opportunity for group life insurance, travel programs, discount buying programs, as well as a variety of social and cultural activities throughout the year.





PART 2

PROGRAMS OF STUDY BY CURRICULUM

The academic programs, whose display of courses appears on pages 34 to 66, are designed primarily for full-time students of the College. It is possible, however, for one to study for an associate degree in any of these curriculums on a part-time basis. To do this, one should contact the appropriate department chairperson. The College's programs that are intended mainly for part-time appear on pages 79 to 85.

BUSINESS

DEPARTMENT CHAIRPERSON, Richard P. Behr
Business Building, Room 107
Telephone 771-5008

ACADEMIC ADVISOR, Robert Newcomb
Business Building, Room 103
Telephone 771-5008

CURRICULUM COORDINATOR, John Bunnell
Business Building, Room 103
Telephone 771-5008

CURRICULUM COORDINATOR, Jan Pitera
Business Building, Room 217
Telephone 771-5175

The Department of Business offers programs in four areas of study -Accounting, Business Administration, Marketing/Management and Real Estate. In addition, the accounting curriculum offers an emphasis in banking, and the marketing/management curriculum offers emphases in marketing, management, retail management, and entrepreneurship. These programs were planned with the assistance of advisory committees made up of individuals currently working in the various areas of business involved. To assist the incoming student in selecting the proper option, all have a common first semester. Thus, the student can delay selection of a program until registration for the second semester. During the first semester of study, all full-time students will be assigned an advisor to assist them in selecting a program and appropriate courses.

Cooperative work experience is available to many business students. This offers the student first hand practical experience and college credit.

Programs in Accounting, Marketing, Management, Entrepreneurship, Banking and Retail Management are career oriented and designed to prepare the graduate for immediate employment. Opportunities exist locally for careers in these fields. The student should note that, although these programs are not designed specifically for transfer, they do provide good transfer opportunities to many four-year colleges and universities. Some four-year schools will accept graduates of these programs at full junior status.

The Business Administration program is designed to facilitate transfer to four-year colleges and universities. If the proper elective sequences are followed, this option will allow the student junior status at almost all four-year schools. *It is of the utmost importance that students confer with their advisor before choosing electives.* The department of Business also offers certificates of competency in Marketing, Management, Accounting, and other areas. See the Academic Advisor for information regarding these.

ACCOUNTING

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	100	Accounting I	4	0	4
BUS	107	The Freshman Experience	1	0	1
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	3	0	3
			17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090A and QBM or QBM or Introduction to Business.

Spring Semester

BUS	101	Accounting II	4	0	4
BUS	120W	Business Law II	3	0	3
CST	107	Business Appl. Micro Computer	3	0	3
BUS		Elective (Pick one elective from group A below)	3-4	0-2	3-4
§MAT	145	Finite Mathematics or MAT 117 Elementary Finite Mathematics	3-4	0	3-4
			16-18	0-2	16-18

§Students who have passed Sequential Math III or Intermediate Algebra in high school will take MAT 145 Finite Mathematics.

SECOND YEAR
Fall Semester

#BUS	200	Intermediate Accounting I	4	0	4
#BUS	205	Cost Accounting I	4	0	4
PHS		Physical Science Student may choose PHS 113, 114, 115 or 116	3	2-3	4
ENG	220	Communicating About Values	3	0	3
ECO	110	Micro Economics	3	0	3
			17	2-3	18

Spring Semester

#BUS	201	Intermediate Accounting II	4	0	4
#BUS	206	Cost Accounting II or			
#BUS	210	Managerial Accounting	4	0	4
SPK	102	Effective Speaking	3	0	3
		Social Science Elective	3	0	3
		Elective (pick one elective from group B below)	3-4	0-2	3-4
			17-18	0-2	17-18

Total Credits: 68-71

Group A Electives: BUS 115★, BUS 224, BUS 245, BUS 249, BUS 262, or a programming language (CST)
Group B Electives: BUS 206, BUS 210, BUS 224, BUS 245, BUS 249, BUS 262, BUS 270★, BUS 295 or a programming language (CST).

★BUS 115 is a prerequisite for BUS 270.

#Take these courses in sequence. They are not offered in all semesters.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

BANKING/FINANCE
EMPHASIS OF ACCOUNTING

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression	3	0	3
BUS	107	The Freshman Experience	1	0	1
*BUS	112	Quantitative Business Methods	3	0	3
		Total	17	0	17

*Depending on Mathematics entrance testing scores and math background, student will take: MAT 090A and QBM or QBM or Introduction to Business

Spring Semester

		Math or Science Elective	3-4	0-3	3-4
BUS	101	Accounting II	4	0	4
BUS	120W	Business Law II	3	0	3
#BNK	168	Principles of Banking	3	0	3
ECO	111	Macro Economics	3	0	3
		Total	16-17	0-3	16-17

SECOND YEAR
Fall Semester

BNK		Banking Elective	3	0	3
#BUS	131	Personal Finance	3	0	3
BUS	152	Selling Fundamentals	3	0	3
ECO	110	Micro Economics	3	0	3
PHS		Physical Science Students may choose PHS 113, 114, 115 or 116	3	3	4
SPK	102	Effective Speaking	3	0	3
		Total	18	3	19

Spring Semester

ENG	220	Communicating About Values	3	0	3
#BUS	135	Investments	3	0	3
BNK		Banking Elective	3	0	3
CST	107	Bus. Appl. on Microcp	3	0	3
BUS	224	Bus. Finance	3	0	3
		Total	15	0	15

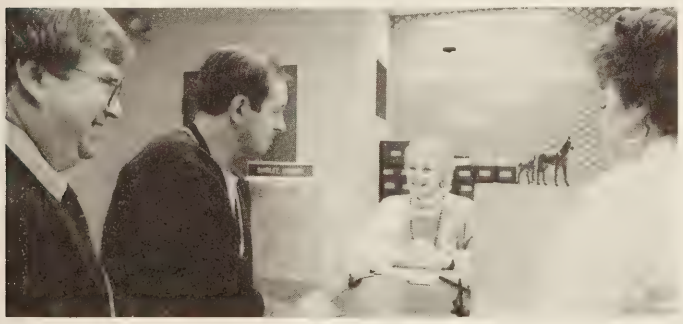
Total Credits: 67-68

#Take these courses in sequence. They are not offered in all semesters.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

NOTE: BNK courses meet evenings only.



BUSINESS ADMINISTRATION
(TRANSFER)

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	100	Accounting I	4	0	4
BUS	107	The Freshman Experience	1	0	1
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	3	0	3
		Total	17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090A and QBM or QBM or Introduction to Business

Spring Semester

BUS	101	Accounting II	4	0	4
BUS	120W	Business Law II	3	0	3
BUS	115	Business Statistics	3	0	3
		§Business, Computer Studies or Liberal and General Studies Elective	3	0-2	3
SPK	102	Effective Speaking	3	0	3
		§Select one of the following			
CST	115	Introduction to PASCAL	2	2	3
CST	118	Introduction to COBOL	2	2	3
CST	107	Bus Aplctn. MICRO. Comp	3	0	3
		Total	18-19	0-4	19

SECOND YEAR
Fall Semester

ECO	110	Micro Economics	3	0	3
MAT	145	Finite Math	3	0	3
PHS	113-116	Lab Science Elective	3	3	4
		§Liberal and General Studies Elective	3	0	3
PED		Physical Education	2	0	1
		§Liberal and General Studies or Business or CST elective	3-4	0-3	3-4
		Total	17-18	0-5	17-18

Spring Semester

ECO	111	Macro Economics	3	0	3
MAT	146	Introduction to Calculus	3	0	3
PHS	113-116	Lab Science Elective	3	3	4
		§Liberal and General Studies Elective	3	0	3
ENG	220	Communicating About Values	3	0	3
		Total	15-16	0-5	16-17

Total Credits: 69-71

§To maximize transfer credit, students **must see their academic advisor** for counseling concerning the proper selection of business, liberal and general studies, and computer science electives. Generally, liberal and general studies electives are recommended for transfer.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

ENTREPRENEURSHIP
EMPHASIS OF MARKETING/MANAGEMENT/SALES

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	110	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	3	0	3
BUS	107	The Freshman Experience	1	0	1
			17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090A and QBM or QBM or Introduction to Business

Spring Semester

CST	107	Bus. Appl. Micro Computer	3	0	3
BUS	101	Accounting II	4	0	4
BUS	120W	Business Law II	3	0	3
		Social Science Elective	3	0	3
$MAT	117	Elem. Finite or			
MAT	139	Algebra	4	0	4
			17	0	17

SECOND YEAR
Fall Semester

#BUS	131	Personal Finance	3	0	3
#BUS	224	Business Finance	3	0	3
SPK	102	Effective Speaking	3	0	3
†PHS	111	Physical Science Today	3-4	0-3	3-4
ECO	110	Micro Economics	3	0	3
			15-16	0-3	15-16

Spring Semester

#BUS	266	Adv. + Pro. for SB	4	0	4
#BUS	263	Small Business Seminar	4	0	4
BUS	245	Management Behavior	3	0	3
ENG	220	Communicating About Values	3	0	3
		Select one of the following			
###BUS	297	Internship	3	0	3
		or			
BUS		Business Elective	3-4	0	3-4
			17-18	0	17-18

Total Credits: 66-68

$ Students will be advised which course to take based on their previous math background.

† Students who are planning to transfer are advised to take PHS 113, 114, 115, or 116.

###Strongly recommended.

Take these courses in sequence. They are not offered in all semesters.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

MANAGEMENT
EMPHASIS OF MARKETING/MANAGEMENT/SALES

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	3	0	3
BUS	107	The Freshman Experience	1	0	1
			17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090A and QBM or QBM or Introduction to Business

Spring Semester

BUS	101	Accounting II	4	0	4
BUS	120W	Business Law II	3	0	3
BUS	152	Selling Fundamentals	3	0	3
PHS		Physical Science	3	3	4
		Student may choose PHS 113, 114, 115 or 116			
MAT	139	Algebra	4	0	4
			17	3	18

SECOND YEAR
Fall Semester

BUS	115	Business Statistics	3	0	3
#BUS	224	Business Finance	3	0	3
BUS	245	Management: A Behavioral Approach	3	0	3
CST	107	Business Appl. Micro Computer	3	0	3
SPK	102	Effective Speaking	3	0	3
ECO	110	Micro-Economics	3	0	3
			18	0	18

Spring Semester

ENG	220	Communicating About Values	3	0	3
#BUS	270	Management Science	3	0	3
BUS	249	Personnel Management	3	0	3
ECO	111	Macro-Economics	3	0	3
		Elect 1 of the following:			
CST	118	Computer Programming—COBOL	(2)	(2)	(3)
CST	115	Computer Programming—PASCAL	(2)	(2)	(3)
		Business Elective	(3)	(0)	(3)
			14-15	0-2	15

Total Credits: 68

#Take these courses in sequence. They are not offered in all semesters.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

MARKETING

EMPHASIS OF MARKETING/MANAGEMENT/SALES

FIRST YEAR

Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	3	0	3
BUS	107	The Freshman Experience	1	0	1
			17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090A and QBM or QBM or Introduction to Business

Spring Semester

BUS	120W	Business Law II	3	0	3
BUS	249	Personnel Management	3	0	3
ECO	110	Micro Economics	3	0	3
PSY	110	General Psychology	3	0	3
SPK	102	Effective Speaking	3	0	3
			15	0	15

SECOND YEAR

Fall Semester

#BUS	229	Advertising	4	0	4
CST	107	Business Appl. Micro Computer	3	0	3
BUS	152	Selling Fundamentals	3	0	3
PHS	111	Physical Science for Today	2	2	3
BUS		Business Elective	3-4	0	3-4
ENG	220	Communicating About Values	3	0	3
			18-19	2	19-20

Spring Semester

#BUS	129	Consumer Behavior	3	0	3
BUS	259	Business Report Writing	3	0	3
#BUS	242	Marketing Seminar	3	0	3
BUS	245	Management: A Behavioral Approach	3	0	3
#BUS	264	Retailing	3	0	3
		Mathematics or Science Elective	3-4	0-3	3-4
			18-19	0-3	18-19

Total Credits: 69-71

#Take these courses in sequence. They are not offered in all semesters.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.



RETAIL MANAGEMENT

EMPHASIS OF MARKETING/MANAGEMENT/SALES

FIRST YEAR

Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	3	0	3
BUS	107	The Freshman Experience	1	0	1
			17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090A and QBM or QBM or Introduction to Business

Spring Semester

#BUS	264	Retailing	3	0	3
BUS	120W	Business Law II	3	0	3
#BUS	129	Consumer Behavior	3	0	3
ECO	110	Micro Economics	3	0	3
		Social Science Elective	3	0	3
SPK	102	Effective Speaking	3	0	3
			18	0	18

SECOND YEAR

Fall Semester

CST	107	Business Appl Micro Computer	3	0	3
#BUS	265	Retail Merchandising	3	0	3
BUS	152	Selling Fundamentals	3	0	3
BUS	259	Report Writing	3	0	3
	**	Math or Science Elective	3-4	0-3	3-4
			15-16	0-3	16-17

Spring Semester

#BUS	130	Retail Management	3	0	3
BUS		Business Elective	3-4	0	3-4
BUS	245	Management: Behav. Approach	3	0	3
ENG	220	Communicating About Values	3	0	3
†PHS	111	Physical Science	3-4	2-3	3-4
			15-17	2-3	15-17

Total Credits: 66-69

†Students who are planning to transfer will be advised to take PHS 113...116 Physical Science

**Recommended that the student consider MAT 117, 124, or 145 when selecting a Math course.

#Take these courses in sequence. They are not offered in all semesters.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

REAL ESTATE
EMPHASIS OF MARKETING/MANAGEMENT/SALES



FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BUS 100	Accounting I	4	0	4
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression I	3	0	3
*BUS 112	Quantitative Business Methods	3	0	3
BUS 107	The Freshman Experience	1	0	1
		17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090A and QBM or QBM or Introduction to Business

Spring Semester

#§BUS 163	Real Estate Salespersons	4	0	4
CST 107	Business Applications on Microcomputer	3	0	3
BUS 152	Selling Fundamentals	3	0	3
BUS 120W	Business Law II	3	0	3
PSY 110	General Psychology	3	0	3
		16	0	16

SECOND YEAR
Fall Semester

#§BUS 164	Real Estate Brokers	4	0	4
BUS 259	Report Writing	3	0	3
SPK 102	Effective Speaking	3	0	3
PHS 111	Physical Science	2	2	3
ECO 110	Micro Economics	3	0	3
		15	2	16

Spring Semester

BUS 229	Advertising	4	0	4
ENG 220	Communicating About Values	3	0	3
BUS 262	Small Business Management	3	0	3
	Math/Science Elective	3-4	0-3	3-4
	Select one of the following			
#§BUS 176	Real Estate Finance	(3)	(0)	(3)
	or			
#§BUS 161	Real Estate Appraisals	(3)	(0)	(3)
		16-17	0-3	16-17

Total Credits: 65-66

#Take these courses in sequence. They may not be offered in all semesters.

§Offered evenings only.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

OFFICE TECHNOLOGIES

DEPARTMENT CHAIRPERSON, To be announced
Business Building, Room 108
Telephone 771-5008

Broome Community College offers three degree options of study in Office Technologies: Executive Secretary, Office Services Assistant, and Word/Information Processing. The department also offers a one-year certificate in Office Technologies. Graduates of the options usually obtain immediate employment as stenographers, secretaries, office assistants, or word processors.

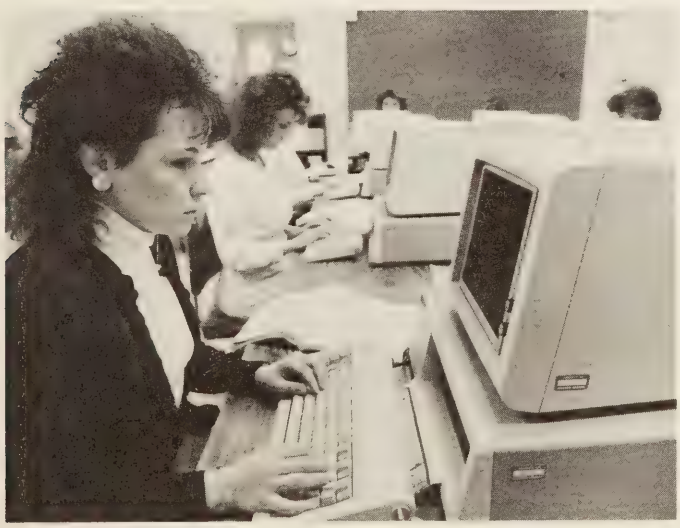
Executive Secretarial students study terminology in such fields as law, education, insurance, real estate, and investments as well as technical terminology so that they can understand the specialized language used in the professions, government, and business firms as well as the specialized language used in engineering and such new fields as the emerging electronic office.

Office Services Assistant students study a variety of courses including accounting, keyboarding and office management. The graduates of the Office Services Assistant option, with its emphasis on machine transcription, text editing concepts, and equipment, should find employment in word processing centers and other areas of office service work.

Word Processing option students concentrate their study in such areas as word processing concepts, text editing functions and applications, business computer applications, data entry, and the administration of electronic offices. These graduates are prepared to handle the basic operations and administrative duties of the integrated electronic office.

The faculty of this department places the responsibility of class attendance upon the student, who should attend classes regularly and on time. Faculty will inform students of the College's and department's attendance and academic dismissal policies. Whenever a faculty member feels that a student has been absent or tardy to the extent that it may be detrimental to the student's academic standing, the faculty member will inform the department chairperson, who will in turn meet with the student concerned for appropriate action.

Non-traditional students and part-time students should meet with the academic advisement coordinator in Room 103 of the Business Building (phone 771-5174) for academic advisement prior to registering for classes. These students must refer to course descriptions to be certain they meet prerequisite requirements prior to registering for courses. If a student fails DOT 103 Keyboarding or DOT 109 Basic Transcription twice, he/she will be dismissed from the program. If the student fails DOT 110 Gregg Shorthand or DOT 112 Speedwriting twice, he/she will be dismissed from the Executive Secretarial option. The student will be given an opportunity to choose another option.



EXECUTIVE SECRETARY

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
*DOT	103	Keyboarding OR			
DOT	104	Intermediate Keyboarding	2	3	3
DOT	109	Basic Transcription	3	0	3
DOT	130	Freshman Orientation	1	0	1
**BUS	112	Quantitative Business Methods	3	0	3
ENG	110	Written Expression I	3	0	3
PSY	110	General Psychology	3	0	3
			15	3	16

*Student's background will determine placement.

**Depending on Mathematics entrance testing scores and Math background the student will take MAT 090A and QBM.

Spring Semester

DOT	104	Intermediate Keyboarding OR	2	3	3
		DOT/BUS Elective	3	0	3
BUS	112	Quantitative Business Methods (if not taken in first semester	3	0	3
BUS	118	Business Law I	3	0	3
DOT	151	Business Communication	3	0	3
DOT	140	Word Processing	1	4	3
DOT	110	Gregg Shorthand OR	2	3	3
DOT	112	Speedwriting	3	2	3
			14-16	9-10	15-18

SECOND YEAR
Fall Semester

DOT	243	Records Management	3	0	1
DOT	262W	Dynamics of Success	3	0	1
BUS	100	Accounting I	4	0	4
ENG	220	Communicating About Values	3	0	3
DOT	215	Information Processing Applications	3	0	3
DOT	113	Shorthand/Speedwriting Transcription	2	3	3
		Lab Science Elective	2	2	3
			20	5	18

Spring Semester

DOT	242W	Office Procedures OR			
DOT	275	Internship	3	0	3
DOT	260	Directed Secretarial Experience OR			
DOT	275L	Internship	0	4	2
DOT	231	Shorthand/Transcription Applications	2	3	3
		Liberal Arts Elective	3	0	3
		Social Science Elective	3	0	3
		Math/Science Elective	2-3	2-3	3-4
			13-14	9-10	17-18

W - Writing Emphasis Course

OFFICE SERVICES ASSISTANT

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
*DOT 103	Keyboarding OR			
DOT 104	Intermediate Keyboarding	2	3	3
DOT 109	Basic Transcription	3	0	3
DOT 130	Freshman Orientation	1	0	1
**BUS 112	Quantitative Business Methods	3	0	3
ENG 110	Written Expression I	3	0	3
PSY 110	General Psychology	3	0	3
		15	3	16

*Student's background will determine placement.

**Depending on Mathematics entrance testing scores and Math background, the student will take MAT 090A and QBM.

Spring Semester

DOT 104	Intermediate Keyboarding OR	2	3	3
	DOT/BUS Elective	3	0	3
BUS 112	Quantitative Business Methods (if not taken in first semester)	3	0	3
BUS 118	Business Law I	3	0	3
DOT 151	Business Communication	3	0	3
DOT 140	Word Processing	1	4	3
ECO 110	Introduction to Micro-Economics	3	0	3
		12-15	4-7	15-18

SECOND YEAR
Fall Semester

++DOT 243	Records Management	3	0	1
++DOT 262W	Dynamics of Success	3	0	1
BUS 100	Accounting I	4	0	4
ENG 220	Communicating About Values	3	0	3
DOT 236	Machine Transcription	3	2	3
DOT 215	Information Processing Applications I	3	0	3
	Lab Science Elective	2	2	3
		21	4	18

++These courses are 5 weeks in length.

Spring Semester

DOT 242W	Office Procedures OR			
DOT 275	Internship	3	0	3
DOT 260	Directed Secretarial Experience OR			
DOT 275L	Internship	0	4	2
ECO 111	Introduction to Macro-Economics	3	0	3
BUS 101	Accounting II	4	0	4
	Math/Science Elective	2-3	2-3	3-4
		12-13	6-7	15-16

W - Writing Emphasis Course

WORD/INFORMATION PROCESSING**

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
*DOT 103	Keyboarding OR			
DOT 104	Intermediate Keyboarding	2	3	3
DOT 109	Basic Transcription	3	0	3
DOT 130	Freshman Orientation	1	0	1
**BUS 112	Quantitative Business Methods	3	0	3
ENG 110	Written Expression I	3	0	3
PSY 110	General Psychology	3	0	3
		15	3	16

*Student's background will determine placement.

**Depending on Mathematics entrance testing scores and Math background, the student will take MAT 090A and QBM.

Spring Semester

DOT 104	Intermediate Keyboarding OR	2	3	3
	DOT/BUS Elective	3	0	3
BUS 112	Quantitative Business Methods (if not taken in first semester)	3	0	3
BUS 118	Business Law I	3	0	3
DOT 151	Business Communication	3	0	3
DOT 140	Word Processing	1	4	3
DOT 141	Word Information Processing	3	0	3
		12-15	3	15-18

SECOND YEAR
Fall Semester

DOT 243	Records Management	3	0	1
DOT 262W	Dynamics of Success	3	0	1
BUS 100	Accounting I	4	0	4
ENG 220	Communicating About Values	3	0	3
DOT 215	Information Processing Applications	3	0	3
DOT 236	Machine Transcription	3	2	3
	Lab Science Elective	2	2	3
		21	4	18

Spring Semester

DOT 242W	Office Procedures OR			
DOT 275	Internship	3	0	3
DOT 260	Directed Secretarial Experience OR			
DOT 275L	Internship	0	4	2
DOT 220	Information Processing Applications II	3	0	3
	Liberal Arts Elective	3	0	3
	Social Science Elective	3	0	3
	Math/Science Elective	2-3	2-3	3-4
		14-15	6-7	17-18

W - Writing Emphasis Course

OFFICE TECHNOLOGIES CERTIFICATE

The Certificate in Office Technologies enables students to complete a program of study in nine months for entry-level employment in the field of Office Technologies.

Candidates must complete the following requirements:

- a minimum of 30 academic credits with a GPA of 2.0 or higher
- 15 credits from the Department of Office Technologies
- 15 credits from any department on Campus including Office Technologies and/or Business
- meetings with an Office Technologies academic advisor to review course prerequisites and to plan the following semester

TRAVEL AND HOTEL TECHNOLOGY

DEPARTMENT CHAIRPERSON, To be announced
ACADEMIC ADVISOR, Robert Newcomb
Business Building, Room 103
Telephone 771-5008

HOTEL TECHNOLOGY: HOTEL/RESTAURANT MANAGEMENT-HOTEL EMPHASIS

COORDINATOR, Donnamarie Battisti, CFBE
Business Building, Room 106
Telephone 771-5008

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	107	The Freshman Experience	1	0	0
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
BUS	112	Quantitative Business Methods	3	0	3
			17	0	16

Spring Semester

TAE	103	Front Office Management	3	0	3
ECO	110	Intro to Micro Economics	3	0	3
BUS	249	Personnel Management	3	0	3
		*Math or Science Elective	(3-4)	(0-3)	(3-4)
SPK	102	Effective Speaking	3	0	3
			15-16	0-3	15-16

SECOND YEAR
Fall Semester

TAE	101	Principles of Food Service	1	6	3
TAE	110	Sanitation Management	1	0	1
PSY	110	General Psychology	3	0	3
TAE	208	Hotel/Restaurant Law	3	0	3
TAE	212	Hotel Marketing & Advertising	3	0	3
		Math/Science Elective	3-4	0-3	3-4
			14-15	6-9	16-17

Spring Semester

ENG	220	Communicating About Values	3	0	3
TAE	242	Sales Promotions & Convention Service	3	0	3
TAE	256	Banquets & Catering	2	3	3
TAE	206	Supervisory Housekeeping/ Prop. Mgt.	3	0	3
TAE	265	Food/Beverage/Labor Costs	3	0	3
TAE	298	Hotel Internship	3	0	3
			17	3	17-18



HOTEL TECHNOLOGY: HOTEL/RESTAURANT MANAGEMENT-RESTAURANT EMPHASIS

COORDINATOR, Donnamarie Battisti, CFBE
Business Building, Room 106
Telephone 771-5008

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	100	Accounting I	4	0	4
BUS	107	The Freshman Experience	1	0	1
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
BUS	112	Quantitative Business Methods	3	0	3
			17	0	17

Spring Semester

BUS	249	Personnel Management	3	0	3
TAE	101	Principles of Food Service	1	6	3
TAE	105	Front of the House Management	3	0	3
TAE	110	Sanitation Management	1	0	1
ECO	110	Intro to Micro Economics	3	0	3
		*Math or Science Elective	(3-4)	(0-3)	(3-4)
			14-15	6-9	16-17

SECOND YEAR
Fall Semester

TAE	208	Hotel/Restaurant Law	3	0	3
TAE	256	Banquets & Catering	2	3	3
PSY	110	General Psychology	3	0	3
TAE	207	Hospitality Principles	3	0	3
SPK	102	Effective Speaking	3	0	3
		*Math or Science Elective	(3-4)	(0-3)	(3-4)
			17-18	3-6	18-19

Spring Semester

TAE	265	Food/Beverage/Labor Costs	3	0	3
ENG	220	Communicating About Values	3	0	3
TAE	242	Sales Promotions/ Convention Service	3	0	3
TAE	206	Supervisory Housekeeping/ Property Management	3	0	3
TAE	298	Restaurant Internship	3	0	3
			15	0	15

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.



TRAVEL AND TOURISM

COORDINATOR, Karen Sherwood
Business Building, Room 106
Telephone 771-5008

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BUS	107	Freshman Experience	1	0	1
BUS	100	Accounting	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	3	0	3
			17	0	17

*Depending on Mathematics entrance testing scores, the student will take: MAT 090A and QBM or QBM or Introduction to Business

Spring Semester

TAE	102	Travel & Tourism I	3	0	3
DOT	108	Keyboarding	1	0	1
BUS	120W	Business Law II	3	0	3
SPK	102	Effective Speaking	3	0	3
MAT	139	Algebra	4	0	4
GEO	120	World Georgraphy OR	3	0	3
SOS		Social Science Elective	3	0	3
			17	0	17

SECOND YEAR
Fall Semester

TAE	117	Travel & Tourism II	3	0	3
TAE	217	Travel & Tourism III	3	0	3
BUS	152	Selling Fundamentals	3	0	3
PHS	113-116	Physical Science	3	3	4
BUS	259	Report Writing	3	0	3
			15	3	16

Spring Semester

TAE	219	Travel & Tourism IV	3	0	3
BUS	211	Business App. Micro Comp.	3	0	3
BUS	262	Small Bus. Management	3	0	3
ENG	220	Communicating About Values	3	0	3
SOS		Social Science Elective	3	0	3
		Select one of the following:			
BUS		Business Elective	3	0	3
BUS		Internship		0	3
			18	0	18

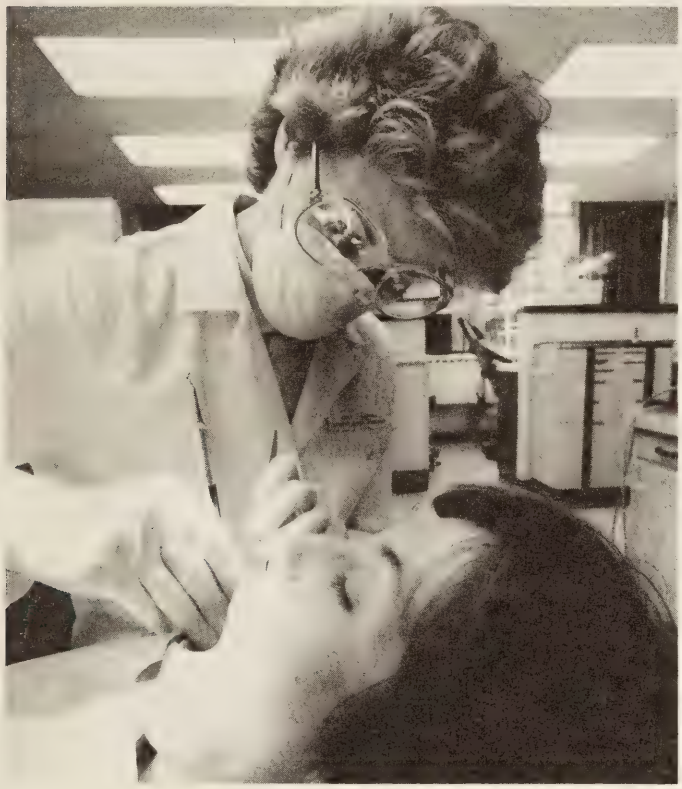
Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

W - Writing Emphasis Course



HEALTH SCIENCES

Opportunities for men and women interested in the health sciences field are provided in six areas - Dental Hygiene, Medical Assisting, Medical Laboratory Technology, Medical Record Technology, Nursing, Physical Therapist Assistant, and Radiologic Technology. All Health Science associate degree programs are fully accredited. Graduates are prepared to work immediately after graduation in physicians' or dentists' offices, laboratories or hospitals. Graduates of these programs are also qualified to take whatever licensing or certification examination their professions require. The College also offers a Dietary Manager Certificate program for those working in the field.



DENTAL HYGIENE

DEPARTMENT CHAIRPERSON, Dorothy J. Walsh
Science Building, Room 108
Telephone 771-5149

The Dental Hygiene curriculum is designed to prepare students for the contemporary practice of dental hygiene. The curriculum emphasizes the fundamental knowledge necessary for practice in a private dental office or similar clinical setting under the supervision of a dentist.

The dental hygienist performs various services, such as dental prophylaxis, topical flouride applications, pit and fissure sealants, dental radiographs and instruction in plaque control procedures. Successful completion of the curriculum permits one to take the required written and practical licensure examinations.

Dental Hygiene graduates averaged $22,529 as starting salaries in 1988, encompassing a range from $15,600 - 37,440.

Students who wish to pursue a career as a dental hygienist in public health, health management, health education or dental hygiene education are encouraged to transfer to a baccalaureate program after graduation.

The program is accredited by the Commission on Dental Accreditation, a specialized accrediting body recognized by the Council on Post-Secondary Accreditation and by the United State Department of Education.

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BIO	131	Human Biology I	3	2	4
DEN	101	Dental Hygiene I	2	6	4
DEN	103	Oral Anatomy and Physiology	2	4	4
ENG	110	Written Expression I	3	0	3
			10	12	15

Spring Semester

BIO	132	Human Biology II	3	2	4
DEN	102	Dental Hygiene II	4	8	6
DEN	106	Clinical Dental Radiography	1	2	2
DEN	110	Dental Materials	2	3	3
BIO	160	Microbiology	2	3	3
			12	18	18

SECOND YEAR
Fall Semester

DEN	201	Dental Hygiene III	2	12	5
DEN	204	General and Oral Pathology	3	0	3
DEN	205	Periodontology	2	0	2
DEN	209W	Nutrition	3	0	3
DEN	213	Public Health	2	2	3
PSY	110	General Psychology	3	0	3
			21	14	19

Spring Semester

DEN	202	Dental Hygiene IV	2	12	5
DEN	206	Dental Pharmacology	2	0	2
DEN	214	Dental Specialties	2	0	2
SOC	110W	Introduction to Sociology	3	0	3
ENG	220	Communicating About Values	3	0	3
			12	12	15

NOTE: 1. Students must complete a Dental Hygiene Departmental Health Questionnaire and be certified in CPR (Cardio-Pulmonary Resuscitation) for Health Professionals prior to admittance to Dental Hygiene I.
2. The Department strongly recommends a vaccination against Hepatitis B prior to treating patients in Dental Hygiene II.
3. Students must be re-certified in CPR for Health Professionals prior to taking Dental Hygiene III.

W - Writing Emphasis Course

GRADUATION REQUIREMENT: 67 CREDITS

MEDICAL ASSISTANT

DEPARTMENT CHAIRPERSON, Teressa H. Buran
Mechanical Building, Room 220
Telephone 771-5261

A Medical Assistant is one of the most versatile of all the allied health professionals. There is a variety of employment opportunities available for individuals with associate degrees. These positions are in physicians' offices, medical centers, clinics, hospitals, armed services, laboratories and pharmaceutical companies. One can also find employment in public, industrial, school, and correctional health departments, as well as in the fields of research, publishing and teaching. A medical assistant can seek additional degrees in such fields as allied health services, health care management, and education. The program is designed to enable graduates to do both administrative assisting and clinical/laboratory assisting.

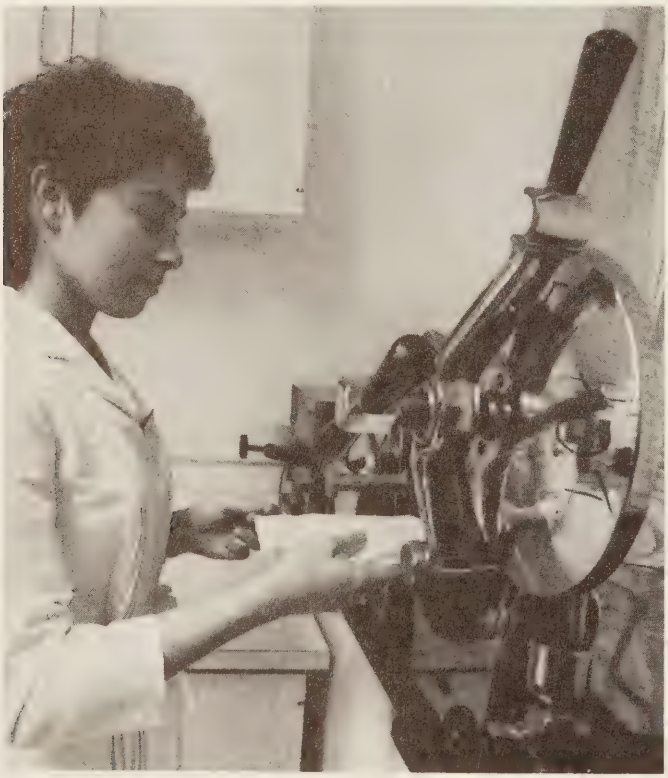
By studying specifically related subjects as medical assisting procedures, clinical laboratory procedures and human biology, students will acquire the knowledge and techniques to prepare patients for examinations and to assist the physician. These courses also prepare students to perform not only routine medical procedures but also electrocardiography, audiometry, urinalysis and hematological tests.

Courses in medical terminology, keyboarding, medical correspondence and medical office management prepare the student to conduct business and administrative duties. English, social sciences, psychology and medical law are included to provide a general background.

Directed Practice is an integral part of the curriculum as senior students participate in a 15 week externship program that requires a working experience in physicians' offices or other health care facilities.

The curriculum is accredited by the Committee on Allied Health Education and Accreditation in collaboration with the American Medical Association (AMA) and the American Association of Medical Assistants (AAMA). Graduates are awarded the Associate in Applied Science degree and may elect to take a national examination given by the AAMA to become Certified Medical Assistants. This CMA status is known throughout the country, recognizing the graduate as a competent professional and leads to improved career opportunities and higher salaries.

Starting salaries of program graduates average over $13,000. The work week is usually less than 40 hours with fringe benefits such as medical care, medications and paid health insurance.



FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BIO 131	Human Biology I	3	2	4
ENG 110	Written Expression I	3	0	3
MDA 102	Medical Assisting Science	2	0	2
MDA 104	Keyboarding and Medical Word Processing	2	3	3
MDA 114	First Aid and Personal Safety; Management of Emergencies	0	2	1
MRT 105	Medical Terminology I	2	0	2
†HSV 101	Cardio-Pulmonary Resuscitation	0	1	½
		12	8	15½

†This course will be given in clusters of 2 hours each of a total of 8 instructional hours.

Spring Semester

BIO 132	Human Biology II	3	2	4
MDA 115	Medical Assisting Procedures I	3	2	4
MDA 106	Medical Correspondence and Communications	0	4	2
MRT 115	Medical Terminology II	2	0	2
SOC 110	Introduction to Sociology	3	0	3
		11	8	15

SECOND YEAR
Fall Semester

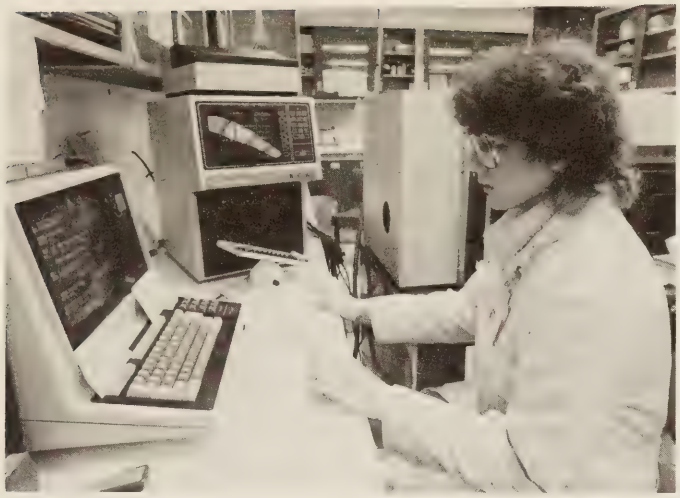
CST 105	Understanding Computers	2	2	3
MDA 206	Medical Office Management	3	3	4
MDA 208	Medical Ethics, Law and Economics	3	0	3
#MDA 211	Medical Assisting Procedures II	2	4	4
PSY 110	General Psychology	3	0	3
		13	9	17

Spring Semester

MDA 201	Medical Assisting Procedures III	2	4	4
MDA 245	Directed Practice & Seminar	1	16	5
MDA 210	Pharmacology	2	0	2
ENG 220	Communicating About Values	3	0	3
		8	20	14

#It is strongly recommended that this course be taken the semester before MDA 245 Directed Practice.

GRADUATION REQUIREMENTS: 61.5 CREDITS



MEDICAL LABORATORY TECHNOLOGY

DEPARTMENT CHAIRPERSON, Julia Peacock
Titchener Hall, Room 221
Telephone 771-5065

Medical Technology is a health profession which combines the best of several worlds. In this field, the basic sciences of Biology and Chemistry are merged with Medicine. Medical Technologists and Medical Laboratory Technicians perform biological tests in search of diagnostic clues as evidence of health or disease.

In the search for data on a patient's health, people working in this field may examine specimens through a microscope or perform, for example, the tests necessary to match a donated unit of blood to a patient in need of that unit. Or, they may identify the microorganisms associated with health and disease. They are also competent operators of the computers and complex electronic instrumentation which are used in most areas of today's laboratories.

Although they usually spend less time with patients than physicians and other health professionals, the Medical Technologist and Technician play a vital role in patient care. In many laboratories, the Medical Technologist and Technician performs the full range of laboratory testing in all six major areas of the laboratory, which are Hematology, Immunology, Microbiology, Body Fluids, Blood Banking, and Chemistry. In other laboratories, the technologists or technician can choose to "specialize" or concentrate study and work in only one of the areas listed.

While entry to the field may be accomplished at the Medical Laboratory Technician (AAS Degree) level, a technician may choose to continue to advance, by education or experience, to the BS level, as a Medical Technologist, or as a specialist in any area they choose. Because of this diversity, many technicians find advancement in their profession well within their grasp.

Students are required to complete health information forms and must carry health insurance during their clinical training in our hospital affiliates.

Approximately two-thirds of practicing technologists work in hospital laboratories. Others are employed in physicians offices, clinics, commercial firms such as pharmaceutical companies, all types of research facilities, the armed forces, public health centers and in veterinary clinics. Many are teachers or serve in managerial positions. Still others are representatives for commercial suppliers or work in product development for those companies.

Wherever they work, the technicians and technologists is this field share a strong desire to help others, a love of challenge and responsibility, and the ability to complete a wide variety of scientific tests accurately and reliably.

This program is accredited by the Committee on Allied Health Education and Accreditation (CAHEA), as recommended by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Pre-admission advisement is recommended.

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BIO 131	Human Biology I	3	2	4
CHM 145	Chemistry	3	3	4
ENG 110	Written Expression	3	0	3
MAT 125	Statistics Using Computers	3	1	3
MLT 110	Introduction to Medical Laboratory Technology	1	0	1
	Social Science Elective	3	0	3
		16	6	18

Spring Semester

BIO 132	Human Biology II	3	2	4
CHM 146	Chemistry	3	3	4
CHM 133	Survey of Organic Chemistry	3	4	4
	Designated Social Science Elective	3	0	3
LIT 200	Introduction to Literature or equivalent	3	0	3
		15	9	18

SECOND YEAR
Fall/Spring Semester

		Hours per Day		Prac.	No. of	Credits per
		Class	Lab	Total	Weeks	Semester
MLT 201	Hematology/ Coagulation	2	4	0	3	3
MLT 201P	Hematology/ Coagulation Practicum	0	0	30	3	3
MLT 202	Urinalysis/Body Fluids	2	4	0	1	1
MLT 202P	Urinalysis/Body Fluids Practicum	0	0	40	1	1
MLT 203	Microbiology	3	3	0	5	6
MLT 203P	Microbiology Practicum	0	0	40	2	2
MLT 204	Phlebotomy	0	0	38	*	1
						17

*Students will be gaining experience in Phlebotomy over a 3-week period.

NOTE-All classes, laboratories and practicum sessions (Prac) in the courses listed above and below meet every school day for the number of weeks indicated. Practicum sessions will be in area participating hospitals. One group of students will take the courses listed immediately above in the fall and those below in the spring. The other group will take the above courses in the spring and those listed below in the fall.

Fall/Spring Semester

		Hours per Day		Prac.	No. of	Credits per
		Class	Lab	Total	Weeks	Semester
MLT 205	Immunology	2	4	0	3	4
MLT 206	Immunohematology	2	4	0	2	2
MLT 206P	Immunohematology Practicum	0	0	35	2	2
MLT 207	Clinical Chemistry	2	4	0	5	5
MLT 207P	Clinical Chemistry Practicum	0	0	35	3	3
CHM 220	Introduction to Instrumental Analysis	†				2
						18

†Students taking Instrumental Analysis will meet for 15 class hours and 45 laboratory hours over the 15-week semester.

GRADUATION REQUIREMENTS: 71 CREDITS

MEDICAL RECORD TECHNOLOGY

DEPARTMENT CHAIRPERSON, Mary Rosato
Business Building, Room 031
Telephone 771-5051

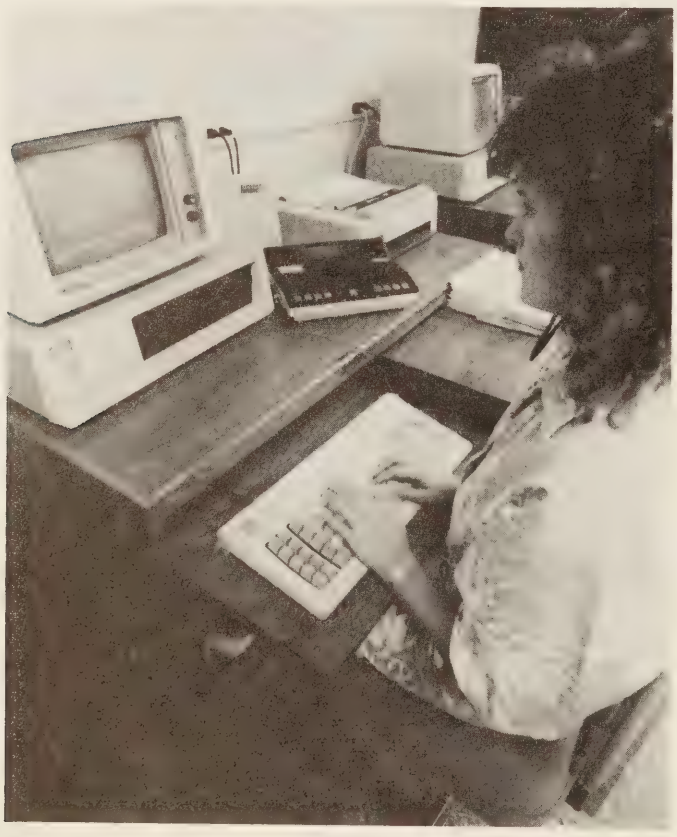
A medical record is the permanent report of a person's illness or injury kept to preserve information of medical, scientific and legal value. The record includes all medical reports which describe how the patient's illness was diagnosed and treated. Medical records are needed to help doctors diagnose and treat future illness, to verify insurance claims, to plan hospitals, to inform the public health officials, and to aid researchers.

The medical record technician works in the medical record department of a hospital, clinic, nursing home, school of veterinary medicine or other health facility and is responsible for many aspects of preparing, analyzing and preserving health information needed by the patients, by the hospital and by the public. The duties include reviewing medical records for completeness and accuracy and also translating diseases and operations into the proper coding symbols.

Other duties include filing medical records, preparing records for microfilm, typing reports of operations, X-rays and laboratory examinations, as well as histories, physical examinations and discharge summaries, compiling statistics of many kinds, assisting the medical staff by preparing special studies and tabulating data from records for research. Supervising the day-to-day operation of a medical record department, taking records to court and maintaining the flow of the total work picture.

Practice in the college medical record laboratory as well as in medical records departments of cooperating hospitals and other health care facilities, either within or outside the area, provides opportunities for additional educational experience which is the vital core of the program.

This curriculum is accredited by the Committee on Allied Health Education and Accreditation of the American Medical Record Association. Students in this program are eligible to take the Medical Record Accredition Examination following graduation and upon completion receive the title of Accredited Record Technician (ART). Salaries for 1987 graduates ranged from $13,488 to $15,500 with an average of $13,942. Graduates can continue medical record education toward a baccalaureate degree at four-year colleges.



FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BIO	131	Human Biology I	3	2	4
ENG	110	Written Expression I	3	0	3
MRT	101	Medical Record Science I	2	0	2
MRT	101L	Medical Record Science I Lab	0	2	1
MRT	106	Medical Terminology	4	0	4
CST	105	Understanding Computers	2	2	3
†HSV	101	Cardio-Pulmonary Resuscitation	0	1	½
			14	7	17½

†This course will be given in clusters of 2 hours each for a total of 8 instructional hours.

Spring Semester

BIO	132	Human Biology II	3	2	4
MRT	107	Medical Transcription	2	2	3
MRT	110	Medical Record Science II	3	0	3
MRT	110L	Medical Record Science II Lab	0	2	1
SOC		Social Science Electives	6	0	6
			14	6	17

Summer Term
*MRT 144 Directed Practice ... 40 Hours per week for 4 weeks—4 Credits

SECOND YEAR
Fall Semester

BIO	140	Pathophysiology	3	0	3
MRT	202	Medical Record Science III	3	0	3
MRT	202L	Medical Record Science III Lab	0	2	1
MRT	208	Advanced Medical Transcription	1	2	2
MRT	222	Medical Legal Aspects	3	0	3
ENG	220	Communicating About Values	3	0	3
			13	4	15

Spring Semester

MRT	210	Medical Record Science IV	2	0	2
MRT	210L	Medical Record Science IV Lab	0	2	1
MRT	295	Medical Record Seminar	2	0	2
MRT	236	Quality Assurance	2	2	3
MRT	216	Clinical Practicum	0	2	1
*MRT	245	Directed Practice	0	40	6
			6	46	15

*This course is conducted in a six-week block time frame. Students will be in a participating facility 5 days a week/8 hours a day.

GRADUATION REQUIREMENTS: 68.5 CREDITS

NURSING

DEPARTMENT CHAIRPERSON, Janet H. Wright
901 Front Street
Telephone 771-5060

Broome Community College offers a two-year, college-based curriculum to prepare graduates for immediate entrance into the first level of registered nursing. Graduates of this curriculum are eligible to take the licensing examination for registered nurses. They are qualified for immediate employment in bedside nursing care, or they may wish to continue their education for the baccalaureate and higher degrees in the nursing field. The 1988 graduates of this program averaged $20,979 in their starting salaries, which ranged from $18,640 to $30,064.

The curriculum operates as a college program, with classes and laboratories held on the campus. Clinical instruction is in the cooperating hospitals and nursing homes of the Triple Cities. The clinical experiences, which are an integral part of the Nursing curriculum, include caring for individuals in all age groups, as well as observation periods in community health and social agencies. Grading in the extended campus laboratory is on a satisfactory/unsatisfactory basis.

Enrollment in the Nursing curriculum requires that each student have a completed health form submitted to the Department Chairperson prior to the first clinical assignment.

Mature men and women are encouraged to enter this program along with recent high school graduates, whether they are married or single.

This program is accredited by the National League for Nursing.

NOTE—Each student enrolled in Nursing is expected to meet the Mathematics proficiency requirement. Also, a health examination and a medical insurance policy are required.



FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
ADN 100	Meeting Basic Human Needs[1]	4	0	4
ADN 100C	Extended Campus Lab[1,2]	0	6	2
BIO 131	Human Biology I	3	2	4
PSY 110	General Psychology	3	0	3
ENG 110	Written Expression I	3	0	3
HSV 101	Cardio-Pulmonary Resuscitation	0	1	.5
		13	5	16.5

Spring Semester

ADN 102	Meeting Mobility Needs[1]	3	0	3
ADN 102C	Extended Campus Lab[1,2]	0	6	2
ADN 103W	Nursing Issues I	2	0	1
ADN 298	Nursing Seminar III[6]	0	0	0
BIO 132	Human Biology II	3	2	4
PSY 210	Developmental Psychology	3	0	3
	Social Science Elective	3	0	3
		14	8	16

SECOND YEAR
Fall Semester

ADN 204	Regulatory Concepts[1]	3	0	3
ADN 204C	Extended Campus Lab[1,2]	0	4.5	1.5
ADN 205	Psychological Concepts I[1]	3	0	3
ADN 205C	Extended Campus Lab[1,2]	0	3	1
ADN 210	Family Centered Maternity Nursing[1]	3	0	3
ADN 210C	Extended Campus Lab[1,2]	0	4.5	1.5
ADN 298	Nursing Seminar III[6]	0	0	0
	Free Elective	3	0	3
		12	12	16

Spring Semester

ADN 206	Concepts of Obstruction & Inflammation[1]	3	0	3
ADN 206C	Extended Campus Lab[1,2]	0	4.5	1.5
ADN 207	Oxygenation Concepts[1]	3	0	3
ADN 207C	Extended Campus Lab[1,2]	0	4.5	1.5
ADN 208	Psychological Concepts II[1]	3	0	3
ADN 208C	Extended Campus Lab[1,2]	0	3	1
ADN 297	Nursing Issues II	2	0	1
ADN 298	Nursing Seminar III[6]	0	0	0
ENG 220	Communicating About Values	3	0	3
		14	12	17

Notes:

1. In order to progress, students must pass clinical course as concurrent course with lecture component.
2. S/U grade for these courses.
3. In order to progress, students must complete assignments in nursing skills center. Nursing skills center assignments are completed outside of class and clinical times.
4. Each student enrolled in Nursing is expected to meet the mathematics proficiency requirement.
5. Clinical experiences for Nursing students may be scheduled during evening hours on their regular extended campus lab days.
6. ADN 298, Nursing Seminar III, is required of all returning, transfer and challenge students.
7. The Nursing program must be completed in 4 academic years.
8. The State Education Department regulations specify that to be licensed as a registered professional nurse in New York State, an applicant:
 a) does not need to be a United State citizen
 b) needs to be of good moral character as determined by the New York State Education Department.

W - Writing Emphasis Course

GRADUATION REQUIREMENTS: 65.5 CREDITS



PHYSICAL THERAPIST ASSISTANT

DEPARTMENT CHAIRPERSON, Nancy W. Waterman
Titchener Hall, Room 221
Telephone 771-5211

The Physical Therapist Assistant is a skilled health technician who works under the supervision of a Physical Therapist. A planned patient care program is carried out by the assistant following established procedures. The extent to which the PTA is involved in treatment depends upon the policies of the facility of employment, the supervising therapist and the patient. Patients include people of all ages who are disabled by illness or accident or who were born with a handicap.

Treatments given by the PTA include exercises for increasing strength, endurance, coordination and range of motion; the use of heat, cold, electricity, sound and water to relieve pain and stimulate muscle activity; instruction in activities of daily living and the use of assistive devices such as walkers, crutches and wheelchairs. The PTA also assists the PT in performing tests, evaluations and complex treatment procedures as well as observing and reporting patient responses to treatment. The work setting may be hospital, nursing home, rehabilitation center or any other facility or area of practice where there is a supervising PT available.

The employment outlook for the PTA is excellent with salary levels that are competitive with or above that of the average community college graduate. At the present time there is a severe shortage of PT personnel nationwide and this shortage is expected to remain for some time to come.

The Physical Therapist Assistant program at Broome Community College is new with the first class expected to graduate in the Spring of 1990. This curriculum is not designed as a transfer program to an upper division physical therapy program. However, if combined with an additional year of successful study in the liberal arts and sciences it may serve as a more reliable vehicle for gaining entry into that highly competitive arena. The program consists of four semesters and one summer term after the second semester. All clinical skills laboratories that are part of the professional course work are graded on a pass/fail basis. All graduates will be licensed to practice as a Physical Therapist Assistant by the State of New York upon application and the payment of required fees. There is no licensing examination.

Clinical education is a necessary component of the program and is initiated after the second semester. Because of the need to schedule large blocks of time for the clinical education courses it may not be possible for students to pursue this program of study on a part-time basis after the second semester's work is completed. In addition, students may be required to travel some distance from home to meet this obligation.

At the present time there is no laboratory space available on campus for the PTA courses. These courses are being taught in the physical therapy departments of various community facilities which are only available when not in use. It is necessary, therefore, that these classes meet in the evening and on Saturday afternoons.

Thirty five hours of volunteer work in a facility providing Physical Therapy Services are required prior to enrollment.

FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
BIO	131	Human Biology I	3	2	4
ENG	110	Written Expression	3	0	3
PSY	110	General Psychology	3	0	3
PTA	100	Introduction to Physical Therapy I	3	0	3
PHY	118	Physic for Physical Therapist Assistant	3	2	4
			15	4	17

Spring Semester

BIO	132	Human Biology II	3	2	4
PSY	210	Developmental Psychology	3	0	3
PTA	101	Introduction to Physical Therapy II	3	0	3
PTA	102	Introduction to Rehabilitation	3	3	4
PTA	103	Physical Agents and Massage	3	3	4
			15	8	18

SUMMER TERM I

PTA	200	Certified First Responder Course[1]	23	14	1.5
PTA	200C	Clinical[2]	0	15	2
			23	29	3.5

SECOND YEAR
Fall Semester

PTA	201	Kinesiology	3	3	4
PTA	202	Therapeutic Exercise	3	3	4
PTA	201C	Clinical[2]	0	12	4
		Elective from Civic Education "W" Course offerings	3	0	3
			9	18	15

Spring Semester

PTA	203	Senior Seminar I[3]	9	0	5
PTA	204	Senior Seminar II[4]	9	0	1
PTA	202C	Clinical[5]	0	40	6
ENG	220	Communicating About Values[3]	6	0	3
			24	40	15

Notes:

1. This course is conducted in a one-week block the first week of Summer Term I.
2. See the course description for clinical affiliation coursework.
3. These courses are conducted in a seven-week block at the beginning of the semester.
4. This course is conducted in a two-week block at the end of the semester.
5. This course is a full-time clinical experience for six weeks and may be at an out-of-town location. Students are responsible for their own transportation and housing arrangements.

GRADUATION REQUIREMENTS: 68.5 CREDITS



RADIOLOGIC TECHNOLOGY

DEPARTMENT CHAIRPERSON, Nancy Button
Business Building, Room 023
Telephone 771-5070

Radiologic Technology is a diverse profession. The radiographer must draw from the fields of communication, psychology, photography and the physical and biological sciences, while utilizing an investigative approach to perform the daily tasks. Radiographers are in demand in nearly every community - in hospitals, physicians' offices, clinics, government, education, industry and research.

The typical role of the radiographer consists of producing radiographs used in the diagnosis of disease and injury. In producing radiographs, the radiographer operates x-ray equipment, provides patient care, provides radiation protection, positions the patient for the examination, selects technical factors for radiographic quality, produces and processes radiographs, maintains quality control and also maintains patient records. Other duties include use of mobile X-ray equipment in the operating room, emergency room and at the patient's bedside.

A radiographer may continue education in areas such as ultrasound, nuclear medicine, special radiographic procedures, Computed Tomography (CT), Magnetic Resonance Imaging (MRI), departmental administration, research, education and radiation therapy.

The Radiologic Technology program at Broome Community College consists of two years of combined academic and clinical education, the equivalent of 24 calendar months. Clinical education is provided in one of our cooperating hospitals. Based on a 40 hour/week schedule, students spend approximately one-third of their time in professional and general education courses at the college. The remaining two-third is spent in the college laboratory or in the hospital, obtaining a complete range of supervised clinical experiences including new imaging modalities.

The clinical experience is a viable part of the educational process. Upon completion of the required hours of clinical practice as well as the academic requirements of the program, the graduate is eligible to sit for the examination of the American Registry of Radiologic Technologists for certification and New York State licensure.

The curriculum is accredited by the Committee on Allied Health Education and Accreditation.

Starting salaries for the 1987 graduates ranged between $14,859 and $26,686, with an average of $20,011.

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
BIO 131	Human Biology	3	2	4
ENG 110	Written Expression I	3	0	3
RAD 100	Introduction to Radiologic Technology	2	3	3
RAD 101	Radiologic Technology I	3	1	3
RAD 103	Positioning I	0	3	1
RAD 105	Medical Terminology	1	0	1
RAD 110	Patient Care	1	1	1
RAD 115	Radiation Protection	1	0	1
†HSV 101	Cardio-Pulmonary Resuscitation	0	1	½
		14	11	17½

†This course will average out to one hour per week over the semester, but will probably be given in clusters of 3 hours each in the evening or of 7½ hours each on Saturday to make a total or 15 hours.

WINTER TERM I

*RAD 131	Clinical Education I	(40 hours per week)

Spring Semester

BIO 132	Human Biology II	3	2	4
SOC 110	Intro. to Sociology	3	0	3
PHY 121	Physicis for Radiographers	3	2	4
RAD 102	Radiologic Technology II	3	1	3
RAD 104	Positioning II	0	3	1
RAD 132	Clinical Education II	0	16	2
		12	24	17

SUMMER TERM I

*RAD 133	Clinical Education III	0	40	3

SECOND YEAR
Fall Semester

PSY 110	General Psychology	3	0	3
RAD 204	Advanced Positioning	1	2	2
RAD 201	Radiologic Technology	3	0	3
RAD 230	Clinical Education IV	0	16	2
ENG 220	Communicating About Values	3	0	3
CST 105	Understanding Computers	2	2	3
		13	20	16

WINTER TERM II

*RAD 231	Clinical Education V	(40 hours per week)		
RAD 216	Imaging Modalities	1	0	1

Spring Semester

RAD 225	Special Radiographic Procedures	3	0	3
RAD 220	Radiologic Pathology	2	0	2
RAD 232	Clinical Education VI	0	24	3
RAD 245	Radiobiology	2	0	2
RAD 250	Image Assessment	2	1	2
RAD 295	Seminar in Radiography	2	0	2
		12	25	15

SUMMER TERM II

*RAD 233	Clinical Education VII	0	40	3

***Successful achievement is a GRADUATION REQUIREMENT**

GRADUATION REQUIREMENTS: 71.5 CREDITS

DIVISION OF LIBERAL AND GENERAL STUDIES

DIVISION DEAN, George Higginbottom
Titchener Hall, Room 121
Telephone 771-5031

One of four academic divisions of the college, Liberal and General Studies has several important functions. First, it offers traditional university-parallel programs—the Associate in Arts and the Associate in Science—to students aspiring to baccalaureate degrees. Graduates transfer to institutions throughout the SUNY system and to public and private colleges in New York and other states.

Second, Liberal and General Studies sponsors a variety of career-oriented programs whose curricular requirements and whose knowledge bases are closely connected with liberal arts subjects. These include Communications and Media Arts, Mental Health (Counseling Psychology and Social Work), Criminal Justice, Early Childhood, Paralegal, and Fire Protection Technology. Several of these degree programs and concentrations are in helping professions commonly referred to as "human services."

As its third major responsibility, Liberal and General Studies provides leadership in setting the standards for "general" education, the learning objectives shared by students in all of the college's curricula. (ref. p. 19)

Following profiles of each program of the division is general information pertaining to academic advisement.







ACADEMIC PROGRAMS

LIBERAL ARTS AND SCIENCES

The Liberal and General Studies curriculum is mainly a two-year university-parallel program designed for those who wish to continue their college education at a four-year school. Graduates of the College in its Liberal Arts program receive either the Associate in Arts or Associate in Science degrees, depending on which course of study they complete.

Students completing this curriculum, its science option or its other emphases will have a breadth of education that prepares them for many professional careers. The Science Option, for example, is excellent for those planning careers in forestry, chemistry, biology or medicine. Those aspiring to careers in the various professions will find alternatives in the Liberal and General Studies curriculum designed especially for them.

Students should be aware that many of these alternative curriculums presume a high level of preparation in the secondary school, and they should consult with faculty advisors or counselors when there is doubt about the adequacy of their pre-college academic background.

Prospective academic majors in the humanities, social sciences, biological sciences and physical education are also taught and advised by divisional faculty and staff. (Refer also to the Career Models on page 63-64.)

ASSOCIATE IN ARTS DEGREE

	Credits Required
English	6
ENG 110 Written Expression I and ENG 220 Communicating About Values	
History	6
HIS 115 Modern Global History plus one other history (HIS) course.	
Mathematics or elective (as advised)	0-8
Students who have completed fewer than 3 units of secondary school mathematics (through Intermediate Algebra or "Course III")* are required to take a minimum of 2 semesters of college level mathematics. Students who have completed 3 units of secondary school mathematics (through Intermediate Algebra or "Course III") are required to take one semester of college level mathematics. Students who have completed more than 3 units of secondary school mathematics (including Intermediate Algebra or "Course III") are not required to take additional mathematics. They may, however, elect an appropriate math course or an elective in another field.	
Laboratory Science	8
A full-year sequence of Biology, Chemistry, Physics or Physical Science. Acceptable sequences: BIO 111-112 General Biology I and II; BIO 131-132 Human Biology I and II; BIO 150-151 Microbiology and Aquatic Biology; CHM 141-142 General Chemistry; CHM 145-146 Chemistry; PHY 161-162 Physics; PHS 113, 114, 115 or 116 Physical Science (any 2).	
Philosophy or Foreign Language Sequence	6-8
Students are encouraged to take both, but they must complete a year (6-8 credits) of either a philosophy or a foreign language sequence.	
Physical Education	2
No more than 2 credits can be used to fulfill degree requirements.	
Literature	6
LIT 200 and LIT elective	
Social Science	6
Courses from the following disciplines: anthropology, economics, g eography, political science, psychology, sociology, social sciences. These have ANT, ECO, GEO, POS, PSY, SOC, SOS designators. At least 3 credits must be from the following courses: ECO 110/111, HIS 130/131, SOC 110/111, SOS 111/120/130, POS 201/204	
Electives	14-24
Selections from approved listing preceding each semester's registration. Exceptions to receive approval of Dean of the LA Division.	
Total number of credits	64 minimum

ASSOCIATE IN SCIENCE DEGREE: SCIENCE OPTION

This program is designed for students planning careers in biology and forest biology, chemistry and forect chemistry, the physical sciences, medicine, dentistry and related fields.

FIRST YEAR	Credits Required Per Year
English	3
ENG 110 Written Expression I	
Literature	3
LIT 200 Introduction to Literature	
History	6
HIS 100 The Rise of the West or HIS 115 Modern Global History and any other history (HIS) course.	
Mathematics	8
MAT 181 and 182 Calculus with Analytic Geometry I and II, or if a student is not prepared for these courses, he or she may take MAT 139 Algebra and or MAT 140 Trigonometry or MAT 161 Pre-Calculus mathematics first.	
2 Laboratory Science Sequences	16
BIO 111 and BIO 112 General Biology I and II and CHM 145 and CHM 146 Chemistry for those planning careers in medicine, veterinary medicine, dentistry, forest biology, marine biology, pharmacy or forest chemistry.	
Physical Education	2
Any PED courses (no more than 2 credits)	
SECOND YEAR	
English	3
ENG 220 Communicating About Values	
Literature	3
LIT elective	
Social Science	6
Courses from the following disciplines -anthropology, economics, geography, political science, psychology, sociology, social science. These have ANT, ECO, GEO, POS, PSY, SOC, and SOS designators. At least 3 credits must be from among the following courses: ECO 110/111, HIS 130/131, SOS 111/120/130, POS 201/204, SOC 110/111	
2 Laboratory Science Sequences	6
PHY 161 and 162 Physics and CHM 245 and 246 Organic Chemistry, for those planning careers in medicine, veterinary medicine, dentistry, forest chemistry, forest biology, marine biology, or pharmacy.	
Mathematics, Philosophy or Foreign Language	6-7
A student must fulfill the mathematics requirements (above) before taking a philosophy or foreign language course. If the student wishes to take a math course more advanced than MAT 182 then he or she with the dean's approval may take another mathematics course. If the math requirement has been completed and the student does not elect to take additional mathematics, then he or she is required to take philosophy or foreign language courses.	
Total number of credits	**72 minimum**

*General Math and Business Math cannot be used in meeting this requirement.

CAREER-ORIENTED PROGRAMS

COMMUNICATION AND MEDIA ARTS

DEPARTMENT CHAIRPERSON, Paul Chambers
Titchener Hall, Room 121
Telephone 771-5163

PROGRAM COORDINATOR, John Butchko
Titchener Hall, Room 103 Telephone 771-5101

The Program of instruction in Communications and Media Arts comprises theoretical and practically-oriented course offerings in audio and visual modes of communication, including film, photography, audio and video production, and various types of written communciation. Communications courses will emphasize acquisition of technical proficiency, theoretical knowledge and where appropriate, aesthetic sensibility.

The program aims, on the one hand, to prepare graduates for immediate employment in a variety of communications-related occupations, and on the other hand, for transfer to Baccalaureate programs.

Graduates entering the job market after earning the associate degree will seek employment as audio-visual coordinators, educational media technicians, and media sales representatives.

Those transferring to upper division colleges will major in audio-visual technology, film and photography, communications, radio and TV broadcasting, journalism, graphic reproduction, acting and advertising. Subsequently, they will seek employment as photographers, filmmaker/cinematographers, scriptwriters, media producers, broadcasters, newspaper reporters, studio technicians, instructional media specialists, video and audio engineers, copy writers, media directors, production media specialists, and sales or marketing managers.



FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
ENG	110	Written Expression I	3	0	3
HIS	115	Modern Global History	3	0	3
COM	100	Intro to Mass Media	3	0	3
*COM		COM elective (choose one) -COM 110 Intro to Photography -COM 125 Intro to Audio Theory & Production -COM 130 Intro to Video Theory & Production	3	0	3
MAT		Mathematics elective	4	0	4
PED		Physical Edu. elective	0	2	1
			16	2	17

*Prospective journalism majors may enroll in ENG 163.

Spring Semester

COM		COM elective (choose two -COM 110 COM 112 COM 125 COM 130 ENG 163	6	0	6
COM/SOS	155	Media/Society	3	0	3
		Science Elective	3	3	4
PED		Physical Edu. elective	0	2	1
		ART/MUS/THR elective	3	0	3
			15	5	17

SECOND YEAR
Fall Semester

COM	200	Image Theory for Film, Photography and TV	3	0	3
PHI		Philosophy Elective	3	0	3
COM		COM electives (choose two) -COM 110 COM 112 COM 125 COM 130 COM 140 COM 203 ENG 168	6	0	6
CST	105	Understanding Computers	2	2	3
			14	2	15

Spring Semester

COM	115	Writing for the Media	3	0	3
COM		COM electives (choose two -COM 110 COM 112 COM 125 COM 130 COM 135 COM 140 COM 200 COM 204 COM 210 COM 299 THR 266 ENG 170 ENG 175	6	0	6
		*Social Science Elective	(3)	(0)	(3)
ENG	220	Communicating About Values	3	0	3
			15	0	15

*Students must choose from ECO 110/111, SOC 110/111, SOS 111/120/130, HIS 130/131, POS 201/204.
Social Sciences recommended.

CRIMINAL JUSTICE

DEPARTMENT CHAIRPERSON, Francis J. Short
Special Career Programs
Mechanical Building, Room 214
Telephone 771-5087

COORDINATOR, Richard Fitzpatrick
Mechanical Building, Room 219
Telephone 771-5029

This program is designed for full-time students desiring employment after two years of study. Careful planning and selection of courses is necessary to complete the program in two years. Consult the Criminal Justice Coordinator for specific details on selection of proper electives. Criminal Justice electives are described on page 100 and some Criminal Justice courses are given in the evening only. (Students entering in the spring semester may require more than four semesters to complete the degree.)



FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
ENG	110	Written Expression I	3	0	3
PSY	110	General Psychology	3	0	3
SOC	110	Introduction to Sociology	3	0	3
CRJ	100	Orientation	1	0	.5
CRJ	101	Introduction to Criminal Justice	3	0	3
CRJ	100	Orientation	1	0	.5
CRJ	125	Penal Law	3	0	3
			15	0	15.5

Spring Semester

SPK	102	Effective speaking or POS 204 State/Local Gov't	3	0	3
CRJ	105	Introduction to Corrections or CRJ 115 Juvenile Justice System	3	0	3
CRJ	212W	Criminal Procedure and Constitutional Law	3	0	3
PSY		Psychology Elective	3	0	3
SOC		Sociology Elective	3	0	3
SAC	101	or SAC 295 or PSY 100	3	0	3
			18	0	18

SECOND YEAR
Fall Semester

		*Math/Science Elective	3-4	0	3-4
PHI		+Elective in Philosophy	3	0	3
CRJ		Elective (130 or 260)	3	0	3
CRJ		Criminal Justice Elective	3	0	3
POS	201	Intro Am Gov't or SPK 102 Eff. Speaking	3	0	3
PED		Physical Ed. Elective	0	2	1
			15-16	0	16-17

Spring Semester

		Math/Science Elective	3-4	0-3	3-4
CRJ	115	Juvenile Justice	3	0	3
CRJ		Criminal Justice Elective (215 or 230)	3	0	3
ENG	220	Communicating About Values	3	0	3
		**Free Elective	3	0	3
PED		Physical Ed. Elective	0	2	1
			15-16	0	16-17

*CHM 121 Forensic Science recommended

+PHI 201 or 206 recommended

**Recommended PSY/SOC electives in order of desirability
PSY 214, 217, 210, 211, 233, 227
SOC 210, 111, 230, HIS 130, PHI 206

General Education Requirements: Students are responsible for fulfilling General Education requirements. See page 19.

W - Writing Emphasis Course

EARLY CHILDHOOD

DEPARTMENT CHAIRPERSON, Francis J. Short
Department of Special Career Programs
Mechanical Building, Room 214
Telephone 771-5087

COORDINATOR, Marilyn Schafer
Mechanical Building, Room 219, Telephone 771-5029

The Early Childhood program leads to an Associate in Applied Science designed to prepare graduates for immediate employment or, in the case of those students who are already working in the Early Childhood field when they enroll, to improve their capabilities and increase their opportunities for advancement. It is open to students on both a full-time and part-time basis.

The starting salary for graduates of the AAS degree program in Early Childhood who go to work immediately after graduation as aides or assistant teachers varies between $4 and $5 per hour. Director's positions usually require a baccalaureate degree with an average salary of $14,000 to $17,000 a year. Two year college graduates sometimes become directors with an additional salary which will vary with teacher's salaries.

A professional portfolio of materials pertaining to the education of young children is required of all students in the program. Assistance is provided in all classes for development of this material.

A Red Cross Safety and First Aid Certificate is recommended. Arrangements for this training are made each semester by the department. Added fee required.

PLEASE NOTE

The curriculum display shown here is for full-time students, and they should be aware that careful advisement is necessary to enable them to be properly scheduled in this program to complete the work in two years. Anyone interested in enrolling as a full-time student should, therefore, consult with the coordinator or department chairman first. The curriculum display for part-time students appears on page 82.

General Education Requirements: Students are responsible for fulfilling general education requirements. See p. 19 of this catalog for reference, and consult with your academic advisor.



FIRST YEAR
Fall Semester

			Hours per Week Class	Lab	Credits per Semester
ENG	110	Written Expression I	3	0	3
PSY	110	General Psychology	3	0	3
ECE	100	Introduction to Education of Young Children	2	2	3
*ECE		Elective or SOC 110	2-3	0-2	3
ECE	175	Techniques of Observation and Evaluation	3	0	3
PED		Physical Ed. Elective	0	2	1
			13-14	4-6	16

Spring Semester

		‡Humanities Elective	3	0	3
PSY	211	Child Development	3	0	3
ECE	120	Cirriculum Development	2	2	3
*ECE		Elective or SOC 110	3	0	3
		†Related Elective	3	0	3
PED		Physical Ed. Electives	0	2	1
			14	4	16

SECOND YEAR
Fall Semester

ECE	170W	Practicum I	3	0	3
ECE		Early Childhood Elective	2-3	0-2	3
		Math/Science Elective	3-4	0-2	3-4
*ECE		Early Childhood Elective	2-3	0-2	3
		†Related Elective	3	0	3
			13-16	0-7	15-16

Spring Semester

ENG	220	Communicating About Values	3	0	3
ECE	290	Practium II			6
*ECE		Early Childhood Elective	2-3	2-0	3
		Math/Science Elective	3-4	0-3	3-4
			8-10	2-3	15-16

ECE COURSES ARE GIVEN MAINLY IN THE EVENING.

*ECE electives may be taken from among ECE 115 Music for Young Children, ECE 140 Art for Young Children, ECE 150 Motor Development, ECE 160 Nutrition for Young Children, ECE Child Health and Safety, ECE 210 Special Programs in Children, ECE 220 Issues and Innovations in Early Childhood, ECE 245 Social Development of Young Children, ECE 250 Language in Early Childhood, ECE 230 Working with Parents Programs.

†Related electives may be taken from among PSY 214 Abnormal Psychology, PSY 217 Counseling and Interviewing, PSY 227 Behavior Modification, SOC 210 Crime and Deviant Behavior, SOC 230 Marriage, Family and Divorce, SAC 101 The Individual in a Changing Environment, SAC 295 Seminar in Human Potential or from other disciplines with permission of the coordinator or department chairperson.

‡Humanities elective might include LIT 263 Children's Literature, ECE 190 Infants, Toddlers and the Family, THR 117 Creative Dramatics, THR 201 Children's Theatre.

W - Writing Emphasis Course

FIRE PROTECTION TECHNOLOGY

The Fire Protection Technology Program is designed to provide fire fighters and related fire service personnel with specialized training. The curriculum has been developed by a local advisory committee to meet the needs of the area, and specialized courses as well as general education courses constitute the degree program. Specialized courses include Fire Fighter Tactics and Strategy, Arson Investigation, Hydraulics, Hazardous Materials, Fire Prevention, and Building Construction.

This program is open to both paid and volunteer fire fighters of the community, as well as those persons in related firematic areas.

More Information
Stephen Andrew, Program Coordinator
Francis J. Short, Chairman
(Phone 771-5087)

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	**Credits**
ENG 110 Written Expression I	3
Fire Protection Courses	9
Additional Courses for Certificate	
Mathematics or Science Elective (see list below)	3-4
Chemistry (see list below)	3
Social Sciences (see list below)	6
Fire Protection Courses	6
	30-31
Remaining Courses for Degree	
Fire Protection Courses	6
Health (see list below)	3
Management (see list below)	6
Electives (see list below)	12
ENG 220 Communicating About Values	3
AAS Fire Protection Technology Minimum Semester Credits	60-61

NOTE: Students must fulfill General Education Requirements. See page 19. Courses taken at the New York State Fire Academy at Montour Falls will be reviewed for credit on an individual basis.

Recommended Electives

Chemistry: Suggest CHM 120 or CHM 121

Mathematics: Suggest MAT 139 (4 Credits) or 124

Social Sciences: Choose from History, Anthropology, Sociology, Psychology, Political Science, Economics. One course must be from the following: SOC 110/111, HIS 130/131, POS 201, SOS 111/120, ECO 110/111.

Health: Advanced First Aid, Emergency Medical Technician. Programs or equivalent may be submitted for approval. Students may elect BIO 131 Human Biology.

Fire Protection Courses: Select from FRS 101W, FRS 103, FRS 105, FRS 107, FRS 108, FRS 200, FRS 201, FRS 205*, FRS 250, FRS 299.

W - Writing Emphasis Course

Management: Suggest BUS 245, BUS 246, BUS 258, BUS 262, BUS 150.

Electives: Courses with FRS, MAT designators, CHM 121, CHM 290, or other courses with permission.

NOTE: Students must fulfill General Education Requirements. See page 19.



INDIVIDUAL STUDIES

DEPARTMENT CHAIRPERSON, Francis J. Short
Department of Special Career Programs
Mechanical Building, Room 214
Telephone 771-5087

To provide opportunities for students with unusual needs or interests, Broome Community College allows **selected students** to structure individualized degree programs. The program requires the student to develop, with an advisor, an "area of concentration." **This area of concentration must be a cohesive program of study which the student can justify as having both educational and personal relevance.**

Completion of the Individual Studies Program can lead to an Associate in Science (AS) or Associate in Applied Science (AAS) degree, depending on the student's area of concentration. The AS degree program is designed for maximum transfer possibilities, and the AAS degree for immediate employment opportunities. **Admission into the program requires development of a Plan of Studies which is approved by the department chairman. This plan is developed by the student with a specific educational or career goal in mind.**

This is **not** a program for students unsure of their goals or exploring several areas of study.

*Associate in Science Degree** (60 credits)
- 30 Credits in student's Area of Concentration.
- 30 Credits in English, Humanities, Natural Sciences, Mathematics and Social Sciences distributed as follows.
 6 Credits in Humanities (ENG 110 and 220 required)
 6 Credits in Social Science (3 must be designated General Education courses)
 8 Credits in Laboratory Science or Mathematics
 10 Credits of Liberal Arts electives

*Associate in Applied Science Degree** (60 credits)
- Minimum of 20 semester credits in Liberal Arts and Sciences to include:
 6 Credits in Humanities (ENG 110 and ENG 220 required)
 6 Credits in Social Science (3 must be in designated General Education courses)
 8 Credits in Natural and Physical Science, including Mathematics
- 10 Credits of Technical Electives
- 30 Credits in student's Area of Concentration

For additional information contact the Department Chairperson.

*Students in both AA and AAS programs must also satisfy General Education requirements. (see p. 19)

MENTAL HEALTH (COUNSELING PSYCHOLOGY AND SOCIAL WORK) EMPHASIS (Associate In Science Degree)

COORDINATOR, Appointment Pending
Telephone 771-5094



This course of study is mainly for students who wish to transfer to upper division degree programs in mental health, such as social work and counseling psychology, and for those already in entry level positions in appropriate public and private agencies. Broad preparation during the first year is followed by greater concentration during the second year.

The number of students permitted to enter the second year of the program is limited by the availability of field placement openings in local agencies. Selection will take place during the spring semester of the Freshman year. Students who do not qualify can still complete A.A. degree requirements within the normal two-year period. For further details inquire at the Liberal and General Studies Division Office in Titchener Hall, (Room 121).

FIRST YEAR

Fall Semester			**Credits**
ENG	110	Written Expression I	3
MAT		(MAT 124 Statistics recommended)	3
HIS	115	Modern Global History	3
		Laboratory Science (BIO 131 Human Biology I recommended)	4
PSY	110	General Psychology	3
PED		Physical Education Elective	1
			17

Spring Semester			
MAT		Math as advised	3
SOC	110	Introduction to Sociology	3
		Laboratory Science (BIO 132 Human Biology II recommended)	4
HIS	186	Modern American Social History	3
PED		Physical Education Elective	1
LIT	200	Introduction to Literature	3
			17

SECOND YEAR

Fall Semester			**Credits**
PSY	223	Intelligence and the Mentally Retarded	3
PSY	217	Counseling Theory and Practice	3
PHI		Philosophy Elective	3
SOC	250	Introduction to Social Work	3
		†Liberal Arts Elective as advised	3
			15

Spring Semester			
PSY	227	Behavior Modification	3
PSY	214	Abnormal Psychology	3
SOS	290	Social Science Field Experience*	3
		Approved Elective	3
ENG	220	Communicating About Values	3
			15

*This internship experience generally involves 6 hours a week in such agencies as Binghamton Psychiatric Center, Broome Developmental Center, Association for Retarded Children, Broome County Social Services, Binghamton City Schools.

NOTE—Two of the above courses must be Writing Emphasis ("W") courses.

PARALEGAL

Suggested Sequence For Part-Time Students: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

More Information
Matthew Vitanza, Program Coordinator
Francis J. Short, Chairperson
(Phone 771-5087)

Introductory Courses			**Credits**
ENG	110	Written Expression I	3
PLA	110	Survey of Paralegalism	3
PSY	110	General Psychology	3
SOC	110	Introduction to Sociology	3
Additional Courses for Certificate			
		Liberal Arts Elective	3
PLA	215	Estates, Probates & Trusts	3
PLA	120	Advanced Paralegalism	3
PLA	207W	Legal Writing and Research	3
PLA	200	Real Property Law	3
PLA		(Paralegal) Elective	3
			30
Remaining Courses for Degree			
BUS	100	Accounting I	4
PLA		(Paralegal) Electives	6
		Math/Science Electives	6
		(Social Science) Elective	3
ENG	220	Communicating About Values	3
BUS		**Business Elective	3
		Free Electives	6
			31
AAS Paralegal Minimum Semester Credits			61

**BUS 249, 245 recommended

Suggested Math/Science Courses:
MAT 124, MAT 145, BIO 131, CHM 120, PHS 111, MAT 113, MAT 114, BIO 120.

W - Writing Emphasis Course

Note: Students must fulfill General Education requirements. See page 19.



Suggested Sequence For Full-Time Paralegal Students (recommendations on electives available from department as part of advisement process).

FIRST YEAR

Fall Semester			Hours per Week		Credits per
			Class	Lab	Semester
PSY	110	General Psychology	3	0	3
ENG	110	Written Expression I	3	0	3
PLA	110	Survey of Paralegalism	3	0	3
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
			16	0	16
Spring Semester					
LIT	200	Introduction to Literature	3	0	3
BUS		Elective 249, 245 rec'd	3	0	3
PLA	120	Advanced Paralegalism	3	0	3
		Arts/Science Elective	3	0	3
PLA	200	Real Property Law	3	0	3
			15	0	15

SECOND YEAR

Fall Semester					
		Math/Science Elective	3-4	3	3-4
PLA	215	Estates, Probates	3	0	3
		*Social Science Elective	3	0	3
PLA		Elective 225, 220 rec'd	3	0	3
		Free Elective	3	0	3
			15-16	3	15-16
Spring Semester					
		Math/Science Elective	3-4	3	3-4
PLA	207	Writing/Research	3	0	3
		Arts/Science Elective	3	0	3
PLA		Elective	3	0	3
ENG	220	Communicating About Values	3	0	3
			15-16	3	15-16

*Choose one from the following: SOC 110/111, HIS 130/131, POS 201, SOS 111/120/130, ECO 110/111.

ACADEMIC ADVISEMENT

ACADEMIC ADVISEMENT

FULL-TIME STUDENTS

Every full-time student is assigned a faculty advisor. Students are encouraged to meet regularly with their advisors. All students are required to complete with their advisors a Degree Advisement Contract prior to each semester's registration. Its purpose is to monitor the student's progress toward the degree.

The divisional office staff is available to deal with special problems relating to academic requirements and transfer. While the faculty and staff will make every reasonable effort to help students with academic planning, students must also assume responsibility for their programs and particularly, in familiarizing themselves with degree requirements.

PART-TIME STUDENTS

Part-time day students who intend to matriculate in a degree program sponsored by the division should come to the office (Room 121 in Titchener Hall) to be assigned academic advisors. Students not interested in a degree, but merely seeking academic advice, may do so in the Liberal Arts Office. Part-time evening students will be advised by a divisional representative available in the Student Information Center, Room 101 of the Library.

COMMUNICATION WITH STUDENTS

The division maintains bulletin boards in the Titchener Hall lobby and outside the office in Titchener Hall, Room 121. Students are urged to check the boards regularly for information pertaining to academic advisement, career planning, cultural events, transfer opportunities, convocations and lectures, concerts, and the like. Important notices and messages for students will also be posted. **Check the boards!**

TRANSFER

Students who have earned A.A. or A.S. degrees at Broome Community College and who intend to go on for baccalaureate degrees are guaranteed transfer to some four-year college or university of the State University of New York (SUNY). While transfer students are usually given full junior standing, there is no guarantee that students entering specialized programs can complete all degree requirements in four semesters.

Students are urged to learn as much as they can about program requirements at the institution(s) to which they might transfer. For example, many four-year schools require foreign language. The decision to take a language at Broome Community College might thus be influenced by whether or not it is required at the college to which one intends to transfer.

The Liberal and General Studies Division has in force a number of guaranteed transfer arrangements with other public and private colleges. Inquiries about these agreements should be made in Titchener Hall, Room 121 or the Counseling and Student Development Center, Wales, Room 200.

CAREER PREPARATION

For a great number of careers a broad background in liberal studies, as is presented in the Associate in Arts (AA) and Associate in Science (AS) degree programs, is essential. Students are urged to utilize the college's resources thoroughly, and as early as possible, in locating useful information about their intended academic majors and their career aspirations.

The divisional advisement system is one which aims to match students with advisors who share their interests. If questions pertaining to career preparation, transfer opportunities and job placement cannot be answered by the faculty advisors, students will be directed to others who can. These are elements of our career guidance support system.

Faculty Advisor	Liberal & General Studies Division Office, Room T-121	Career Counselor/ Transfer Counselor (Counseling Ctr. Rm W-200)

To start students thinking about a career and the preparation needed, a number of fields which suggest a liberal studies background are listed below. The college does not offer courses in all these areas, and in some cases the professional courses are taught only at the junior/senior level in baccalaureate programs.

Acting
Advertisement
Architecture
Art
Chiropractic
Commercial Art
Communications
Community/Human Service
Counseling
Criminal Justice
Dentistry
Design
Energy Research
Environment
Foreign Service
Forestry
Government Service
Home Economics
Interior Design
International Business
Journalism
Labor Relations
Law
Management
Library Science
Media Communications
Medicine
Mental Health
Music
Oceanography
Optometry
Paralegal
Personnel
Physical Therapy
Psychologist
Public Administration
Public Relations
Public Service
Publishing
Real Estate
Recreation
Social Work
Scientific Research
Sports Writing
Teaching
Technical Writing
Translating
Transportation
Urban Planning
Writer/Critic

LIBERAL AND GENERAL STUDIES SPECIAL CAREER PROGRAMS

DEPARTMENT CHAIRPERSON, Francis J. Short
Mechanical Building, Room 214
Telephone 771-5087

EARLY CHILDHOOD
Coordinator, Marilyn J. Schafer
Mechanical Building, Room 219
Telephone 771-5029
page 58

CRIMINAL JUSTICE
Coordinator, Richard Fitzpatrick
Mechanical Building, Room 219
Telephone 771-5029
page 57

FIRE PROTECTION TECHNOLOGY
Coordinator, Stephen Andrew
Mechanical Building, Room 214
Telephone 771-5087
page 59

PARALEGAL
Coordinator, Matthew A. Vitanza
Mechanical Building, Room 214
Telephone 771-5087
page 61

INDIVIDUAL STUDIES
Coordinator, Francis J. Short
Mechanical Building, Room 214
Telephone 771-5087
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MODEL PROGRAMS for Liberal and General Studies Minimum Credit - 64 (Associate in Arts Degree)

These model programs are designed to help students with identifiable career or academic interests get an early start. All courses in the concentration are lower division offerings. You are advised to review transfer requirements of a range of baccalaureate granting colleges to ensure that your course selections align with transfer requirements. Assistance: Room T-121 or the Counseling and Student Development Center.

Students with advanced placement credit and those with 3½ units of academic mathematics will be able to take additional elective courses with their advisor's approval.

Students who enter with academic deficiencies may have to take more than the minimum 64 credits to earn the Associate of Arts degree. For example, students deficient in written communication will take ENG 090 Basic Language Skills before registering in ENG 110.

ART

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	ENG 220	(3)
HIS 115	(3)	HIS elective	(3)
LIT 200	(3)	LIT elective	(3)
MAT electives	(0-8)	Laboratory Science Sequence	(8)
Philosophy or Foreign Language	(6-8)	Social Science electives	(6)
*PHI 111 and 112		ART electives	(9)
ART electives	(12)	ART 215, 216	
*ART 115, 101		*ART 105 or 106	
*ART 116, 140		Physical Ed. electives	(2)
Total	33-35	Total	36

BUSINESS

(For Transfer to Baccalaureate Programs in Business)
This model is appropriate for transfer to SUNY Binghamton School of Management

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	ENG 220	(3)
HIS 115 and elective	(6)	Laboratory Science sequence	(8)
*MAT 124 and 146 or 181	(6-7)	ECO 110 and 111	(6)
LIT 200	(3)	LIT elective	(3)
Philosophy or Foreign Language	(6-8)	Business electives	
Physical Ed. electives	(2)	*BUS 100 and 101	(8)
Business electives		*BUS 245	(3)
*BUS 110	(3)	†CST 105, 118	(3)
*BUS 118	(3)		
Total	32-34	Total	34

CIVIL AND PUBLIC SERVICE

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	ENG 220	(3)
HIS 115 and elective	(6)	Philosophy elective	(3)
*HIS 131		*PHI 206	
Philosophy or Foreign Language	(3-4)	Social Science elective	(3)
MAT electives	(0-6)	*POS 204, SOS 111	
*MAT 124		Related electives	(20)
Laboratory Science sequence	(8)	ECO 104, 110, 111	
Social Science elective	(3)	PSY 110	
*POS 201		SOC 110, 111	
Physical Ed. electives	(2)	BUS 100	
BUS 245, 257			
LIT 200	(3)	LIT elective	(3)
Total	34-35	Total	32

CRIMINAL JUSTICE

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	Laboratory Science sequence	(8)
HIS 115	(3)	*CHM 120 and 121	
MAT electives	(6-8)	Philosophy or Foreign Language	(6-8)
†MAT 117		LIT elective	(3)
*MAT 124		Criminal Justice electives	(9)
LIT 200	(3)	ENG 220	(3)
POS 201	(3)	*SOC 210	(3)
Social Science Elective	(6)		
*PSY 110 and SOC 110			
Criminal Justice electives	(6)		
*CRJ 100			
Physical Ed. electives	(2)		
Total	32	Total	32

CYTOTECHNOLOGY

(For Transfer to the SUNY Health Science Centar at Syracuse "B" grades in science courses required)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	BIO 131 and 132	(8)
BIO 111 and 112	(8)	LIT elective	(6)
CHM 145 and 146	(8)	Social Science electives	(6)
LIT 200	(3)	Physical Ed. electives	(2)
BIO 150	(4)	Philosophy or Foreign Language	(6-8)
MAT 124	(3)	ENG 220	(3)
HIS 115 and elective	(6)		
Total	35	Total	31-33

DESIGN ARTS

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	Laboratory Science sequence	(8)
HIS 115 and elective	(6)	LIT elective	(3)
MAT electives	(6-8)	Social Science electives	(6)
Philosophy or Foreign Language	(6-8)	*PSY 110	
*PHI 111 and 112		Design electives	(12)
Design electives	(6)	*INT 110	
*ART 105, 106		†ART 115	
*INT 101		†INT 105	
Physical Ed. electives	(2)	ENG 220	(3)
LIT 200	(3)		
Total	32-34	Total	32

EARLY CHILDHOOD

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	HIS 115 and elective	(6)
MAT electives	(6-8)	Philosophy or Foreign Language	(6-8)
Laboratory Science sequences	(8)	LIT elective	(3)
*BIO 131/132 or BIO 111/112		*LIT 263	
Social Science	(6)	Early Childhood electives	(9)
*PSY 110		Free electives	(6)
*SOC 110		†PSY electives	
Early Childhood Electives	(6)	†THR or MUS electives	
*ECE 100		ENG 220	(3)
Physical Ed. electives	(2)		
LIT 200	(3)		
Total	24	Total	33-35

ELEMENTARY EDUCATION

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT elective	(3)
HIS 115	(3)	ENG 220	(3)
MAT 119 and 120	(6)	Philosophy or Foreign Language	(6)
Laboratory Science sequences	(8)	*Philosophy 203 and elective	
LIT 200	(3)	HIS elective	(3)
Social Science Electives	(6)	Electives	(18)
*PSY 110		PSY 210, 211	
*SOC 110		*ART electives	
*GEO 110		*MUS electives	
PED electives	(2)	THR electives	
For Elementary Teachers			
Total	31	Total	33

FOREST RESOURCES MANAGEMENT

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
*ENG 110	(3)	Philosophy or Foreign Language	(6-8)
HIS 115 and elective	(6)	ENG 220	(3)
MAT 181	(4)	LIT elective	(3)
		Social Science electives	(6)
		*ECO 110 POS 201	
Laboratory Science sequences	(8)	Laboratory Science	(8)
*BIO 111 and 112		*PHY 161	(3)
Physical Ed. electives	(2)	CST 105	(3)
LIT 200	(3)	Free electives	(3)
*CHM 145 and 146		†PSY 110, SOC 110, 111	
		*POS 204, MAT	
Total	34	Total	32

FOREST TECHNOLOGY

FIRST YEAR Courses	(Credits)	SECOND YEAR (Wanakena)
ENG 110	(3)	
LIT elective	(3)	
MAT 139 and 140	(8)	
ECO 110 or 111	(3)	
BIO 111 and 112	(8)	
Electives	(6)	
*BIO electives		
Total	31	

*These courses are "strongly recommended".
† These courses are "recommended".

JOURNALISM

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	Laboratory Science sequence	(8)
HIS 115	(3)	LIT elective	(3)
MAT electives	(6-8)	Social Science electives	(6)
Philosophy or Foreign Language	(6-8)	Journalism electives	(9)
LIT 200	(3)	*ENG 164, COM 100	
Physical Ed. electives	(2)	*ENG 165	
Journalism electives	(6)	†COM 110, 115	
*ENG 163, ENG 164		†SPK 102	
*COM 100		†COM 125, 130	
SOS 155	(3)	HIS elective	(3)
		ENG 220	(3)
Total	32-34	Total	32

LANDSCAPE ARCHITECTURE

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT elective	(3)
		CIV 115, CIV 119, or 159	(4)
HIS 115 and elective	(6)	Social Science electives	(6)
MAT electives	(0-8)	ENG 220	(3)
*MAT 139, 40		Related courses	(16)
†MAT 181, 182		*ART 105	
Laboratory Science sequence	(8)	*CIV 111 *ART 106	
*BIO 111, 112		*CST 110	
Philosophy or Foreign Language	(6-8)	*PHS 116 *ART 115	
Physical Ed. electives	(2)	PHY 161	
LIT 200	(3)		
†INT 101			
Total	34-36	Total	32

MEDICAL TECHNOLOGY

(For Transfer to SUNY Health Science Center at Syracuse "B" grades in science courses required)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	BIO 131	(4)
BIO 111 and 112	(8)	BIO 150	(4)
CHM 145 and 146	(8)	CHM 245	(5)
MAT 161 or equivalent	(4)	PSY 110	(3)
HIS 115	(3)	HIS elective	(3)
LIT 200	(3)	ENG 220	(3)
Philosophy or Foreign Language	(6-8)	Social Science elective	(3)
		CHM 224	(4)
		LIT elective	(3)
		Physical Ed. electives	(2)
Total	35	Total	34

MUSIC AND MUSIC EDUCATION

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	Laboratory Science sequence	(8)
HIS 115	(3)	History elective	(3)
MAT electives	(0-6)	LIT elective	(3)
Philosophy or Foreign language	(6-8)	Social Science electives	(6)
†Italian or		ENG 220	(3)
†PHI 111, 112		Physical Ed. electives	(1)
Physical Ed. electives	(6)	*Music electives	(9)
MUS 105 and 106		MUS 190 MUS 192	
*Music electives	(1)	MUS 193 MUS 194	
MUS 190 MUS 192		MUS 195 MUS 196	
MUS 193 MUS 194		*Applied Music	
MUS 195 MUS 196		MUS 297 MUS 298	
*Applied Music		*Introduction To Music	
MUS 197 MUS 198		MUS 101	
LIT 200	(3)	(Additional courses)	
		MUS 180, MUS 185	
Total	34	Total	33

MUSEUM CAREERS

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	HIS elective	(3)
HIS 115	(3)	Laboratory Science sequence	(8)
MAT electives	(0-6)	LIT elective	(3)
*MAT 124		Social Science electives	(6)
Philosophy or Foreign Language	(6-8)	*ANT 110/111	
*Foreign Language		†PSY 110	
Physical Ed. electives	(2)	†SOC 110	
Electives	(7-10)	Electives	
*ART 101, 105		*INT 101, *ART 106	
*PHI 111/112		†BUS 110, †ECO 110	
LIT 200	(3)	ENG 220	(3)
Total	34	Total	33

*These courses are "strongly recommended"
†These courses are "recommended"

PHYSICAL EDUCATION/RECREATION

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT elective	(6)
HIS 115 and elective	(6)	Social Science electives	(6)
MAT electives	(0-6)	*SOC 110	
Philosophy or Foreign Language	(6-8)	*PSY 210 or 214	
*PHI 203 and elective		Laboratory Science sequence	(8)
PED 132	(2)	†BIO 131, 132	
Related electives	(6)	Related electives	(9)
*PSY 110		ENG 220	(3)
*ART, MUS, THR, SPK			
LIT 200	(3)		
Total	32-34	Total	32

PHYSICAL THERAPY

(For Transfer to SUNY Health Science Center at Syracuse "B" grades in all required courses)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	PHY 161 and 162	(8)
MAT 161		PSY 110 and 211	(6)
(181 recommended)	(4)	SOC 110	(3)
BIO 111 and 112	(8)	ENG 220	(3)
CHM 145 and 146	(8)	Philosophy or Foreign Language	(6-8)
HIS 115 and elective	(6)	LIT elective	(3)
LIT 200	(3)	Physical Ed. electives	(2)
Total	32	Total	32

PRE-LAW

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT elective	(3)
HIS 115	(3)	Social Science electives	(6)
MAT electives	(0-8)	Electives	(18)
Laboratory Science sequence	(8)	POS 201, 204	
Foreign Language or Philosophy	(6-8)	ECO 110, 111, 104	
PHI 206, PHI 202		SOC 110, 111, SOS 111	
PHI 203		HIS 130, 131	
LIT 200	(3)	PSY 110	
PED elective	(1)	BUS 100	
ART, MUS, THR	(3)	ENG 220	(3)
		HIS elective	(3)
Total	33	Total	33

PUBLIC HISTORY

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT elective	(3)
HIS 115 and elective	(6)	*LIT 210, 211, 230	
MAT electives	(0-8)	Social Science electives	(6)
*MAT 124		*POS 201, 204	
Philosophy or Foreign Language	(6-8)	*PSY 110, SOC 110	
Physical Ed. electives	(2)	Laboratory Science sequence	(8)
Electives	(3-9)	Electives	(12)
*HIS 175		*SOC 120	
*POS 201		*HIS 130, 170, 180	
*POS 204		*SOC 120, 130	
LIT 200	(3)	†ECO 110, 111	
		ENG 220	(3)
Total	32	Total	32

SPECIAL EDUCATION

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110 (3)		LIT elective	(3)
HIS 115	(3)	ENG 220	(3)
MAT electives	(6)		
*MAT 113, 114, 119, 120		Social Science elective	(3)
Laboratory Science sequence	(8)		
*BIO 131, 132		Physical Ed. electives	(2)
Social Science elective	(3)	Related electives	(21)
*PSY 110		*PSY electives	
Philosophy or Foreign Language	(6-8)	*MUS, THR, ART	
*PHI 203	(3)	*HUS 120	
LIT 200	(3)	*SOS 290	
Total	32-34	Total	33

THEATER

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	Labortory Science sequence	(8)
HIS 115 and elective	(6)	LIT elective	(3)
MAT electives	(0-6)	ENG 220	(3)
Philosophy or Foreign Language	(6-8)	Social Science elective	(6)
Physical Ed. electives	(2)	†PSY 110	
Theater electives	(6)	Theater electives	(12)
*THR 190		*THR 190	
*THR 111, 112		*THR electives	
*THR 221			
LIT 200	(3)		
Total	32	Total	32

SPECIAL TRANSFER AGREEMENT PROGRAMS

These are special Agreement Programs with other Colleges and Universities in which students spend either their first year or first two years at Broome and their last year(s) at another institution.

HUMAN DEVELOPMENT AND FAMILY STUDIES (SUNY College of Human Ecology at Cornell)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT Elective	(3)
*HIS 100 or 115 and elective	(3)	MAT elective	(3)
MAT 124	(3)	PSY 211 and 212	(6)
PSY 110	(3)	Social Science Electives	(6)
*BIO 131 and 132	(8)	FREE Electives	(9)
Philosophy or Foreign Language	(6-8)	Physical Education	(1)
Physical Education	(1)	ENG 220	(3)
LIT 200	(3)		
Total	33-35	Total	31

FOREST CHEMISTRY (SUNY College of Environmental Science and Forestry, Syracuse)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT Elective	(3)
*HIS 100 or 115 and elective	(6)	CHM 245, 246	(10)
BIO 111 and 112	(8)	PHY 161, 162	(8)
CHM 145 and 146	(8)	ECO 110	(3)
MAT 181	(4)	Social Science Elective	(3)
Philosophy Elective	(3)	Philosophy Elective	(3)
LIT 200	(3)	Physical Education	(2)
		ENG 220	(3)
Total	35	Total	35

RESPIRATORY THERAPY (1 + 1) (Transfer to SUNY Health Science Center at Syracuse)

FIRST YEAR Courses	(Credits)	
ENG 110	(3)	—GPA requirement is 3.0 (B)
*HIS 100 or 115 and elective	(6)	
Philosophy or Foreign Language	(3)	—Requires also observation or volunteer work in a respiratory therapy setting.
Laboratory Science *BIO 131 and 132	(8)	
MAT Elective	(3-4)	
Physical Education	(2)	
LIT 200	(3)	
Total	31	

SOCIAL WORK (SUNY College of Human Ecology at Cornell)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT Elective	(3)
*HIS 100 or 115 and elective	(6)	Philosophy or Foreign Language	(6-8)
Laboratory Science sequence *BIO 131 and 132	(8)	CST 105 or 115	(3)
		ENG 220	(3)
MAT elective	(3)	PSY 210, 214	(6)
PSY 110 and SOC 110	(6)	SOC 230	(3)
LIT 200	(3)	ELECTIVES	(9)
Physical Education	(2)	SOC 210, POS 204 ECO 110/111, PSY 227, ANT 111	
Total	31	Total	33

ENVIRONMENTAL AND FOREST BIOLOGY (SUNY College of Environmental Science and Forestry, Syracuse)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT Elective	(3)
*CHM 145 and 146	(8)	Philosophy or Foreign Language	(6-8)
BIO 111 and 112	(8)	CHM 245 and 246	(10)
MAT 181	(4)	Social Science Electives	(6)
HIS 100 or 115 and elective	(6)	PHY 161 and 162	(8)
Physical Education Elective	(2)	ENG 220	(3)
LIT 200	(3)		
Total	34	Total	36-38

CONSUMER ECONOMICS AND HOUSING (SUNY College of Human Ecology at Cornell)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT Elective	(3)
*MAT 145 and 146	(6)	ECO 110 and 111	(6)
HIS 100 or 115 and elective	(6)	CST 110	(3)
Laboratory Science Electives	(8)	PED	(1)
BIO 131/132 or CHM 145/146 or PHY 161/162		POS 201	(3)
Philosophy or Language	(6-8)	BUS 141	(3)
Physical Education	(1)	PSY 110	(3)
LIT 200	(3)	ENG 220	(3)
		SOC 110	(3)
		Free Electives	(3)
Total	33-35	Total	31

INTERIOR DESIGN/HUMAN ENVIRONMENT (SUNY College of Human Ecology at Cornell)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT 200 and elective	(6)
HIS 115 and elective	(6)	Philosophy or Foreign Language	(6-8)
ART 101	(3)	PSY 110	(3)
ART 105 and 115	(6)	Social Science Elective	(3)
INT 110	(4)	INT 101	(3)
Laboratory Science	(8)	INT 111	(4)
MAT 145	(3)	ART 106	(3)
Physical Education	(1)	Physical Education	(1)
		ENG 220	(3)
Total	34	Total	32-34

(Freshman year BCC, Sophomore year at:)

DELHI A&T
General Agriculture
Animal Husbandry-Dairy

CANTON A&T
Mortuary Science

WANAKENA
See Forest Technology
Model Program

Details in Titchener Hall, Room 121

*These courses are "strongly recommended"
†These courses are "recommended"

TECHNOLOGY, ENGINEERING AND COMPUTING

In the area of technical education , the College offers 9 programs. One, Engineering Science, is in effect the first two years of an engineering curriculum. Students who do satisfactory work in it should experience little difficulty in transferring to engineering colleges at the third-year level.

Four others are designed to educate engineering technicians in the fields of Chemical Engineering Technology, Civil Engineering Technology, Electrical Engineering Technology and Mechanical Engineering Technology. Students in these programs are prepared for employment in various types of technical work immediately after graduation, although many students do transfer to four-year colleges.

The Computer Studies Department offers three programs -Computer Science, Computer Technology and Data Processing. The Computer Science program is designed to prepare graduates for transfer to four-year colleges, while graduates of the other two are prepared for immediate employment or possible transfer.

Additionally, the College offers a program in Industrial Technology.

CHEMICAL ENGINEERING TECHNOLOGY

DEPARTMENT CHAIRPERSON, Dr. Harold H. Trimm
Science Building, Room 108, Telephone 771-5009

The Chemical Engineering Technology curriculum is designed to meet the increasing demand for chemical technicians. Graduates are qualified for immediate gainful employment. Many of them have also continued their studies toward advanced degrees in chemistry at the junior level either as full-time students or on a part-time basis while employed. With additional physics and mathematics, some graduates have also continued their studies in chemical engineering. This background makes the Chemical Engineering Technology graduate highly sought after by employers and concurrently affords them the flexibility to advance academically and professionally.

Chemical technicians of both sexes have filled a vital manpower need in companies and organizations where background in various areas of chemistry is necessary or desirable. The Chemical Engineering Technician has opportunities to be employed in a wide variety of fields such as petroleum and other forms of energy, pharmaceuticals, plastic rubber, pulp and paper, and biological and electronic materials. Non industrial job opportunities exist in medical laboratories, municipal health and sanitation agencies, and state and federal environmental agencies.

Employers of chemical technicians include IBM (Endicott, Vermont, Mass., and Austin), Anitec, NYSEG, GE (Westover and Schenectady) Norwich-Eaton Pharmaceuticals, Sandia, Hadco, Bendix, Chenango Industries, International Paper, Eastman Kodak, Union Carbide, Grumman Aerospace, Sandoz Pharmaceuticals and many others.

Initial positions are usually in a research, development, process, quality control or analytical laboratory or in a pilot plant. In these positions a chemical technician may work for a senior staff member or be a member of a group working in a particular area. Experienced chemical technicians have become supervisors, group leaders, technical salesmen, and research and development technicians.

The 1988 graduates of this program averaged $19,300 in starting salaries ranging from $13,000 to $22,000.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET), and it leads to an Associate in Applied Science degree.



FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
ENG 110	Written Expression I	3	0	3
CHM 161	Chemistry	3	4	4
*MAT 161	Pre-Calculus	4	0	4
†PHY 141	Physics	3	2	4
		13	6	15

Spring Semester

ENG 150	Technical Writing	3	0	3
CHM 162W	Chemistry	3	4	4
*MAT 162	Applied Calculus I	4	0	4
†PHY 142	Physics	3	2	4
CST 140	Computer for Chemists	2	2	3
		15	8	18

SECOND YEAR
Fall Semester

CHM 251	Chemical Engineering Tech Seminar	1	0	½
CHM 261	Organic Chemistry	3	6	5
CHM 265	Analytical Chemistry	3	6	5
CHM 271	Chemical Processes	3	4	5
	Social Science Elective	3	0	3
		13	16	18½

Spring Semester

CHM 262	Organic Chemistry	3	6	5
CHM 266	Analytical Chemistry	3	6	5
CHM 272	Chemical Processes	3	4	5
	Social Science Elective	3	0	3
		12	16	18

GRADUATION REQUIREMENT: 69½ CREDITS

*or MAT 181-182 Calculus with Analytic Geometry and I and II
†or PHY 161-162 Physics

W - Writing Emphasis Course

CIVIL ENGINEERING TECHNOLOGY

DEPARTMENT CHAIRPERSON, Edward F.Dougherty
Mechanical Building, Room 117
Telephone 771-5010

The Civil Engineering Technology curriculum at Broome Community College is designed to prepare graduates for technical positions in the civil engineering and construction industries. The primary objective of the program is to train engineering technicians who will work for civil engineers, heavy and building contractors, surveyors and architects.

PROGRAM EMPHASES

Architectural Drawing-Design and CAD
Construction (Inspection-Estimating-Project Management)
Plane and Route Surveying
Structural Design Concepts

Starting positions may be in computer aided design (CAD), drafting design, estimating, testing of materials, specification writing, construction inspection, surveying, field engineering, sales and insurance adjusting. Excellent opportunities exist for advancement and promotion.

Starting salaries over the last two years averaged $16,982 and ranged from $14,102 to $24,960. Placement records suggest both appealing and successful opportunities exist for graduates.

The Civil Engineering Technology Department offers the Associate in Applied Science degree in Civil Engineering Technology. This degree is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

Graduates of the program are eligible to become certified as Associate Engineering Technicians by the Institute for the Certification of Engineering Technicians.

Job opportunities exist locally, statewide and nationally for technicians regardless of gender. Graduates are employed by both large and small companies, and public agencies.

About 30% of the graduates transfer into Bachelor level programs.

In order for students to complete the curriculum in two years, the proper preparation is necessary. The minimum prerequisites are high school intermediate algebra, trigonometry and regents physics or their equivalents.

The curriculum is comprised of various clusters of courses that result in specialization in one or more of the Program Emphases.



FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
CIV	111	Surveying I	2	6	4
CIV	115	Engineering Drawing I	1	3	2
CIV	110	Introduction to Technologies	1	0	½
ENG	110	Written Expression I	3	0	3
†MAT	161	Pre-Calculus	4	0	4
*PHY	141	Physics	3	2	4
			14	11	17½

Spring Semester

CIV	112	Surveying II	1	3	2
CIV	119	Architectural Drafting	0	4	2
CIV	124	Mechanics	3	0	3
†MAT	162	Applied Calculus I	4	0	4
PHY	142	Physics	3	2	4
ENG	150	Technical Writing	3	0	3
			15	8	18

*Students Entering the program without physics may elect to take PHY 100 Preparatory Physics I during the first semester in place of PHY 141 Physics. PHY 141 Physics may be taken during the spring semester and PHY 142 Physics and CIV 124 Mechanics during the summer. This would allow the student to graduate on schedule. Preparatory Physics is not applicable toward the degree.

†Or MAT 181-182 Calculus with Analytic Geometry I and II.

SECOND YEAR
Fall Semester

CIV	215	Strength of Materials	4	0	4
CIV	217W	Materials Testing	2	3	3
CST	122	Scientific Computer Programming FORTRAN	2	2	3
		Social Science Elective	3	0	3
		Technical Elective (Choose 1)			
CIV	238	Architectural Design and Building Materials	(2)	(3)	(3)
CAD	205	Intro. to Computer Graphics with Arch. Applications	2	2	3
*MAT		Mathematics Elective	(4)	(0)	(4)
			13-15	5-9	16-17

Spring Semester

†CIV	224	Reinforced Concrete Design			
		or	2	3	3
CIV	226	Structural Steel Design			
		Social Science Elective	3	0	3
		(Choose 4 courses)			
CIV	216	Route Surveying	(2)	(3)	(3)
CIV	236	Construction Management	(3)	(0)	(3)
CIV	231	Estimating and Construction Planning	(2)	(3)	(3)
CIV	240	Soil Mechanics	(2)	(3)	(3)
CIV	237	Hydraulics	(2)	(3)	(3)
*MAT		Mathematics Elective	(4)	(0)	(4)
CAD		Elective			3
			13-16	9-15	18-19

†Waiver of this requirement by permission of department chairperson only.

*For students planning to transfer to a 4-year college. Prior approval by department chairman required.

W - Writing Emphasis Course

GRADUATION REQUIREMENTS: 69½ CREDITS

COMPUTER STUDIES

DEPARTMENT CHAIRPERSON, Paulette Gannett
Applied Technology Building, Room 011
Telephone 771-5022

The Computer Studies Department offers three different degree programs. Additionally, if a student is lacking required prerequisites for one of the three degree-granting programs, a student can be admitted as a Pre-Computer Studies student until the requirements are met. In each one the student will learn to write modular structured programs which are well documented, easy to read and maintain. All courses will emphasize the importance of written and oral communication.

Students who choose a career in computing must, above all else, have the ability to think logically. They should be interested in organizing and analyzing information and should be able to pay close attention to detail and accuracy. Interesting and exciting careers are ahead for the student who has the personal drive to explore new fields of application and the ability to communicate with computer users.

The three degree programs are described below. The entrance requirements for each program are detailed on page 9 of this catalog. Typical four semester course sequences are shown on the pages following this one.

Part-time student programs are developed on an individual basis with the assistance of an academic advisor.

THE COMPUTER SCIENCE PROGRAM is designed to prepare graduates to transfer to four-year colleges and continue work toward a Bachelor of Science degree in Computer Science. During the first semester the student selects an emphasis (mathematics, technical, or business) and is encouraged to investigate transfer colleges and select elective courses with a future career in mind. The emphasis on mathematics, structured programming, science, and data structures allows transfer with Junior standing. Graduates who wish to postpone transfer can find interesting employment opportunities.

THE COMPUTER TECHNOLOGY PROGRAM places less emphasis on mathematics and more on computer hardware, digital logic and microprocessors. Graduates are prepared to work in a technical environment where a knowledge of the interface between hardware and software is necessary. Starting positions include computer operator, technician, engineering aide, associate field engineer. Average starting salary is about $15,000. Graduates often find that more education is desirable. Transfer to four-year schools is possible and elective courses can be selected to allow transfer with Junior standing.

THE DATA PROCESSING PROGRAM places emphasis on solving business problems. Graduates are prepared to work in a business environment where a knowledge of computer programming and application software is necessary. Starting positions include computer operator, junior programmer, data entry technician, information processing equipment operator. Average starting salary is about $15,000. This program meets the requirements of the DPMA (Data Processing Management Association) Model Curriculum for Computer Information Systems. With proper choice of electives, graduates who find that more education is desirable will be able to transfer all credits to institutions offering this four-year degree.

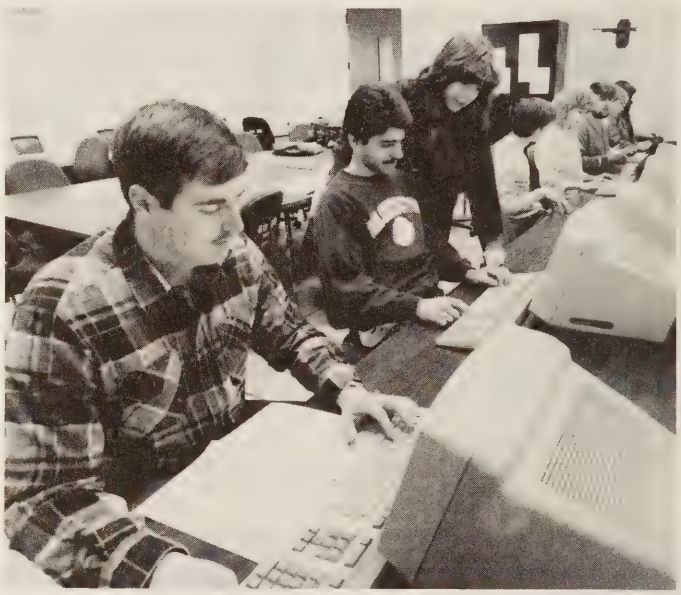
PRE-COMPUTER STUDIES is for students not prepared for entry into the regular Computer Science, Computer Technology or Data Processing program. Students who have not completed required high school subjects, such as Course I, II, and III Math, may be admitted to the department as Pre-Computer Science students. Students in this program will take additional semesters of course work to prepare them for the standard Computer Studies curricula. Each student will be tested in the College Learning Center prior to scheduling to determine which level of Math and English courses are needed. Students who have not completed a high school computer course will be required to take an introductory computer course. Students planning on enrolling in the Computer Technology Program who have not completed high school Physics will be required to take preparatory physics. The actual student schedule will be personalized by the department for each student entering Pre-Computer Science depending on the student's Math, English and/or Science abilities. All courses taken to meet prerequisite requirements will not count as credit towards the three different degree programs.

STUDENTS CAN ATTEND FULL-TIME OR PART-TIME BOTH DAY AND EVENING

PRE-COMPUTER STUDIES

The listing below shows some typical courses taken by Pre-Computer Studies Students:

		Class	Lab	Credits
CST 105	Understanding Computers	2	2	3
CST 115	Introduction to Pascal	2	2	3
CST 117	Language Independent Design Tools	2	0	2
CST 118	Introduction to Cobol	2	2	3
CST 119	Computer Concepts and Applications	1	2	2
ENG 090	Basic Language Skills	4	0	0
ENG 110S	Written Expression	4	0	3
or				
ENG 110	Written Expresssion	3	0	3
MAT 090	Basic Mathematics Review	3	0	0
MAT 104	Basic Technical Mathematics	5	0	5
MAT 139	Algebra	4	0	4
MAT 140	Trigonometry	4	0	4
MAT 161	Pre-Calculus	4	0	4
	Social Science Elective	3	0	3





COMPUTER SCIENCE
(Associate in Science Degree)

The listing below shows the degree requirements. Electives are determined by the emphasis chosen. Students may select from Business, Technical, and Mathematics emphasis shown on the following pages.

		Credits
CST 117	Language Independent Design Tools	2
CST 119	Computer Concepts and Applications	2
CST 132	Structured Programming in Pascal	4
MAT or CST	Electives	9
	Electives must include either CST 202W Data Structures with Advanced Pascal or CST 218W Advanced Cobol	
MAT 181	Calculus with Analytic Geometry 1	4
MAT 182	Calculus with Analytic Geometry 2	4
MAT 250	Discrete Mathematics	4
MAT 264	Linear Algebra	4
Laboratory Science Sequence		8
	A full year sequence of physics, chemistry or physical science. Acceptable sequences: PHY 141-142, PHY 161-162, PHY 181-182 Physics; CHM 145-146 Chemistry; PHS 113-114-115-116 Physical Science (any 2)	
English 110 Written Expression		3
English 220 Communicating About Values		3
Social Science W		6
	Choose from ANT, ECO, GEO, POS, PSY, SOC, SOS. One Course must be from the following: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.	
History		3
PHI 202 Logic		3
Physical Education		2
Approved Electives		6
	See emphasis for recommended electives. All others must be approved by the Department Chairperson.	

GRADUATION REQUIREMENT: 67 CREDITS

W - Writing Emphasis Course

COMPUTER SCIENCE
Business Emphasis
(Associate in Science Degree)

FIRST YEAR
Fall Semester

			Hours per Week Class	Hours per Week Lab	Credits per Semester
CST	117	Language Independent Design Tools	2	0	2
CST	119	Computer Concepts and Applications	1	2	2
CST	132	Structured Prog. in Pascal	3	2	4
ENG	110	Written Expression I	3	0	3
MAT	181	Cal I w/Analyt Geometry	4	0	4
		*Social Science Elective	3	0	3
			16	4	18

Spring Semester

CST	128	Structured Prog with COBOL	3	2	4
		History Elective	3	0	3
MAT	182	Cal II w/Analyt Geometry	4	0	4
PHI	202	Logic	3	0	3
		*Social Science W Elective	3	0	3
		Physical Education Electives	0	2	1
			16	4	18

SECOND YEAR
Fall Semester

CST	218W	Advanced COBOL	2	2	3
MAT	250	Discrete Mathematics	4	0	4
BUS	100	Accounting I	4	0	4
		Lab Science (begin sequence)	3	3	4
ENG	220	Communicating About Values	3	0	3
			16	5	18

Spring Semester

MAT	264	Linear Algebra	4	0	4
BUS	101	Accounting II	4	0	4
		Lab Science (complete sequence)	3	3	4
MAT/ CST		Elective	2-4	0-4	3-4
		Physical Education Electives	0	2	1
			13-15	5-9	16-17

GRADUATION REQUIREMENTS: 70-71 CREDITS

*One Course must be from the following: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.

W - Writing Emphasis Course

See General Education Requirements on pg. 19.

COMPUTER SCIENCE
Mathematics Emphasis
(Associate in Science Degree)

FIRST YEAR Fall Semester			Hours per Week Class	 Lab	Credits per Semester
CST	117	Language Independent Design Tools	2	0	2
CST	119	Computer Concepts and Applications	1	2	2
CST	132	Structured Prog in Pascal	3	2	4
ENG	110	Written Expression	3	0	3
MAT	181	Cal I w/Analyt Geometry	4	0	4
		*Social Science Elective	3	0	3
			16	4	18
Spring Semester					
CST	202W	Data Structures w/Adv Pascal	2	2	3
		History Elective	3	0	3
MAT	182	Cal II w/Analyt Geometry	4	0	4
PHI	202	Logic	3	0	3
		*Social Science W Elective	3	0	3
		Physical Education Electives	0	2	1
			15	4	17
SECOND YEAR **Fall Semester**					
CST	170	Digital Logic	2	2	3
MAT	250	Discrete Mathematics	4	0	4
MAT	281	Cal III w/Analyt Geometry	4	0	4
PHY	161	Physics 1	3	3	4
ENG	220	Communicating About Values	3	0	3
			16	5	18
Spring Semester					
MAT	264	Linear Algebra	4	0	4
MAT	266	Intro to Higher Math	3	0	3
PHY	162	Physics 2	3	3	4
CST	220	Microproc & Assembly Language	(2)	(2)	(3)
		or			
MAT	282	Differential Equations	(4)	(0)	(4)
		Physical Education Electives	0	2	1
			12-14	5-7	15-16

GRADUATION REQUIREMENTS: 68-69 CREDITS

*One Course must be from the following: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.

W - Writing Emphasis Course

See General Education Requirements on pg. 19.



COMPUTER SCIENCE
Technical Emphasis
(Associate in Science Degree)

FIRST YEAR Fall Semester			Hours per Week Class	 Lab	Credits per Semester
CST	117	Language Independent Design Tools	2	0	2
CST	119	Computer Concepts and Applications	1	2	2
CST	132	Structured Prog in Pascal	3	2	4
CST	170	Digital Logic	2	2	3
ENG	110	Written Expression 1	3	0	3
MAT	181	Cal I w/Analyt Geometry	4	0	4
			15	6	18
Spring Semester					
CST	202W	Data Structures w/Adv Pascal	2	2	3
CST	220	Microproc & Assembly Language	2	2	3
		*Social Science Elective	3	0	3
MAT	182	Cal II w/Analyt Geometry	4	0	4
PHI	202	Logic	3	0	3
		Physical Education Electives	0	2	1
			14	6	17
SECOND YEAR **Fall Semester**					
CST	225W	Introduction to Small Systems	2	2	3
MAT	250	Discrete Mathematics	4	0	4
PHY	161	Physics 1	3	3	4
		**Approved Elective	2-4	0-4	3-4
		*Social Science Elective	3	0	3
			14-16	5-9	17-18
Spring Semester					
MAT	264	Linear Algebra	4	0	4
		**CST Elective	3	0	3
PHY	162	Physics 2	3	3	4
ENG	220	Communicating About Values	3	0	3
		Physical Education Elective	0	2	1
		History Elective	3	0	3
			16	5	18

GRADUATION REQUIREMENTS: 70-71 CREDITS

*One Course must be from the following: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.

W - Writing Emphasis Course

**Approved Electives:
CST 155, CST 158, CST 160, CST 180, CST 181, CST 213, CST 214, CST 228, CST 297, CAD 150, CAD 205, CAD 211. Others require permission of Department Chairperson.

See General Education Requirements on pg. 19.

COMPUTER TECHNOLOGY
(Associate in Applied Science Degree)



FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
CST	117	Language Independent Design Tools	2	0	2
CST	119	Computer Concepts and Applications	1	2	2
CST	132	Structured Prog in Pascal	3	2	4
CST	170	Digital Logic	2	2	3
ENG	110	Written Expression 1	3	0	3
PHY	161	Physics	3	3	4
			14	9	18

Spring Semester

MAT	125	Statistics I Using Computers	3	1	3
CST	202W	Data Structures w/ Adv Pascal	2	2	3
		*Social Science Elective	3	0	3
CST	220	Microproc & Assembly Language	2	2	3
PHY	162	Physics	3	3	4
			13	8	16

SECOND YEAR
Fall Semester

CST	225W	Introduction to Small Systems	2	2	3
MAT	145	Finite Mathematics	3	0	3
CST		Approved Elective	2-4	0-2	3-4
		†Approved Elective	2-4	0-4	3-4
		*Social Science Elective	3	0	3
			12-14	2-8	15-17

Spring Semester

ENG	220	Communicating about Values	3	0	3
		†Approved Elective	2-4	0-4	3-4
CST		Approved Elective	2-4	0-2	3-4
CST		Approved Elective	2-4	0-2	3-4
SPK	102	Effective Speaking	3	0	3
			12-18	8	15-18

GRADUATION REQUIREMENT: 64—69 CREDITS

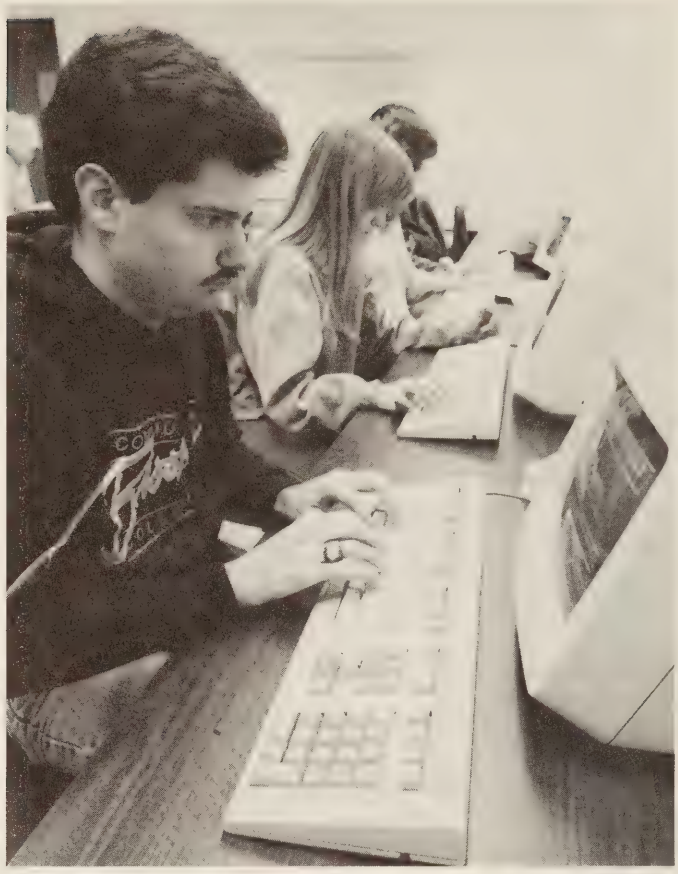
†CST 155, CST 158, CST 160, CST 180, CST 181, CST 213, CST 214, CST 228, CST 297, MAT 161, MAT 181, MAT 182, CAD 150, CAD 205, CAD 211. Others require permission of Department Chairperson.

*One Course must be from the following: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.

W - Writing Emphasis Course

See General Education Requirements on pg. 19.

DATA PROCESSING
(Associate in Applied Science Degree)



FIRST YEAR
Fall Semester

			Hours per Week		Credits per Semester
			Class	Lab	
CST	117	Language Independent Design Tools	2	0	2
CST	119	Computer Concepts and Applications	1	2	2
CST	128	Structured Programming in COBOL	3	2	4
ENG	110	Written Expression 1	3	0	3
MAT	125	Statistics 1 Using Computers	3	1	3
BUS	100	Accounting 1	4	0	4
			16	5	18

Spring Semester

CST	218W	Advanced COBOL	2	2	3
CST	158	Spreadsheets-Financial Applications	2	2	3
		*Social Science Elective	3	0	3
SPK	102	Effective Speaking	3	0	3
BUS	101	Accounting 2	4	0	4
			14	4	16

SECOND YEAR
Fall Semester

CST	200	Systems Analysis 1	2	2	3
CST	213	Database Systems	2	2	3
CST/		MAT/BUS Elective	2-4	0-2	3-4
		**Physical Science Elective	3	3	4
		*Social Science Elective	3	0	3
			12-14	7-9	16-17

Spring Semester

CST	116	RPG II and RPG III	2	2	3
CST	201W	Systems Analysis 2	2	2	3
CST	214	Computer Operations: Procedures Management	2	2	3
CST/		MAT/BUS Elective	2-4	0-2	3-4
ENG	220	Communicating About Values	3	0	3
			11-13	6-8	15-16

GRADUATION REQUIREMENT: 65-67 CREDITS

**ANY ONE of the following physical science courses: PHS 113, 114, 115, 116

*One Course must be from the following: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.

W - Writing Emphasis Course.

See General Education Requirements on pg. 19.

ELECTRICAL ENGINEERING TECHNOLOGY

DEPARTMENT CHAIRPERSON, Alan C. Dixon
Applied Technology Building, Room 201
Telephone 771-5017

The Electrical Engineering Technology program at Broome Community College is made up of a planned sequence of college level courses leading to the Associate in Applied Science Degree. Engineering Technology emphasizes both the theory and application of established scientific and engineering methods and prepares the student for immediate employment or for transfer to an upper division school upon graduation.

The graduate is prepared to be the interface between the design engineer and skilled craftsman. He/She translates problems into functioning equipment using his/her knowledge of mathematics, physics, linear and digital electronics, microprocessor hardware and software, machines, robotics, process control, circuit analysis, and computer programming languages. He/She does this whether working in a small company as the only technician or in a large company as part of a team.

This program may require longer than two years to complete if an entering student has not completed math 1, 2, 3 and physics in high school. Students lacking any of these courses enter our pre-electrical technology program and may be required to take MAT 104 Basic Technical Math to prepare them for MAT 139 College Algebra and MAT 140 Trigonometry or PHY 100 Preparatory Physics and EET 110 Introduction to Electricity to prepare for Electrical Circuits and College Physics.

The department will tailor a program to match an individual student's background to the two year program. While an additional year may be required, each individual is assured the opportunity to earn the A.A.S. degree in Electrical Engineering Technology. As an accredited, state-of-the-art program, the department is proud of its graduates and their role in modern industry. Graduates are very successful and many rise to management positions in less than five years.

Graduates work for companies like New York State Electric and Gas, International Business Machines, Xerox, Eastman Kodak, General Electric, Universal Instruments, Link Flight Simulation, Bell Laboratories, Raymond Corporation, Sandia National Laboratory, Digital Equipment Corporation, and Corning Glass.

Starting positions include engineering assistant, technical specialist for electronics, computers, field service, or sales. Starting salaries for graduates averaged $17,776 in 1988, covering a range from $15,000 to $23,920.

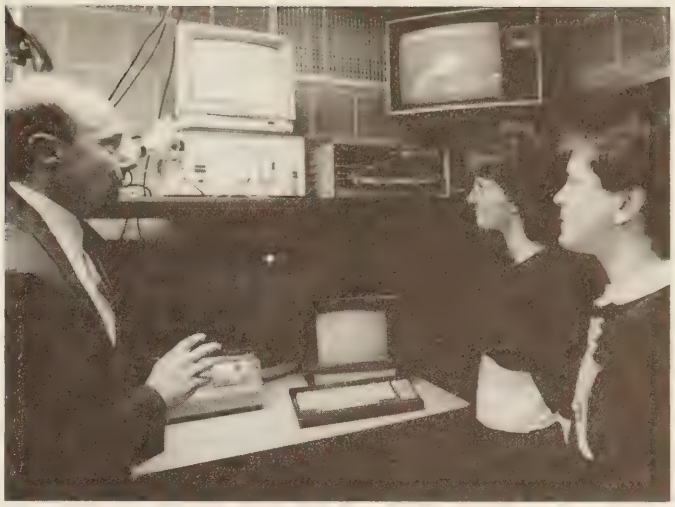
Many graduates find that more education is desirable and have successfully completed advanced study at State University of New York Colleges at Binghamton, Utica-Rome, and Buffalo, as well as at Rochester Institute of Technology, Clarkson University, and others.

Graduates with a minimum GPA of 2.5 can transfer with full junior status into a Bachelor of Technology program at a number of institutions. Some graduates prefer a pure engineering degree and transfer to accredited Bachelor of Science programs. Usual requirements are a minimum GPA of 3.2 and appropriate additional courses in Math (MAT 181, MAT 182, MAT 281) and Physics (PHY 181, PHY 182, PHY 281).

Students use excellent state-of-the-art computer facilities which include personal computers and three VAX computers interconnected by a local area network, Ethernet. The faculty, along with large, well equipped labs and highlighted by a 30 foot high open atrium create a learning atmosphere that is first class.

The program has grown in its 41 years to embrace the areas of microprocessors, robotics, and fiber optics. In its new facilities are housed specialized equipment including logic analyzers, development systems, robots, spectrum analyzers, digital signal processors, programmable component analyzers, power system simulators, and numerous CAD (computer aided design) workstations. The program and equipment remain current through the efforts of an experienced and dedicated faculty. The program was recently listed as the third largest Electrical Engineering Technology associate degree program in the country.

The program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).



PRE-ELECTRICAL ENGINEERING TECHNOLOGY

The following are suggested sequences of courses for students not prepared for entry into the regular Electrical Engineering Technology program. This sequence is for students who have not had the necessary high school math and physics. Each entering student is tested in the College Learning Center prior to scheduling. The actual student schedule is personalized by the department for each entering student.

#1 - First Semester		Hours per Week		Credits per
		Class	Lab	Semester
EET 100	Introduction to Electrical Engineering Technology	1	0	0.5
EET 110	Introduction to Electricity	3	0	3
EET 111	Electrical Construction Lab I	1	3	2
MAT 139	Algebra	4	0	4
PHY 100	Preparatory Physics	4	0	4
		13	3	13.5
Second Semester				
EET 112	Electrical Construction Lab II	0	3	1
ENG 110	Written Expression	3	0	3
MAT 140	Trigonometry	4	0	4
PHY 141	Physics	4	0	4
		11	3	12

OR

#2 - First Semester				
EET 100	Introduction to Electrical Engineering Technology	1	0	0.5
EET 110	Introduction to Electricity	3	0	3
EET 111	Electrical Construction Lab I	1	3	2
ENG 110	Written Expression	3	0	3
MAT 104	Basic Technical Mathematics	5	0	5
		13	3	13.5
Second Semester				
EET 112	Electrical Construction Lab II	0	3	1
EET 130	Engineering Drawing	0	3	1
ENG 150	Technical Writing	3	0	3
MAT 139	Algebra	4	0	4
PHY 100	Preparatory Physics	4	0	4
		11	6	13

ELECTRICAL ENGINEERING TECHNOLOGY

FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
CST 141	Fortran Programming with Graphic Applications	2	2	3
EET 111	Electrical Construction Laboratory I	1	3	2
EET 121	Electrical Circuits	4	3	5
EET 100	Introduction to Electrical Engineering Technology	1	0	½
ENG 110	Written Expression I	3	0	3
*MAT 161	Pre-Calculus	4	0	4
		15	8	17½

Spring Semester

EET 112	Electrical Construction Laboratory II	0	3	1
EET 130	Engineering Drawing	0	3	1
EET 150W	Electronic Devices	4	3	5
EET 162	Computer Aided Network Analysis	3	0	3
ENG 150	Technical Writing	3	0	3
*MAT 162	Applied Calculus I or	4	0	4
*MAT 181	Calculus I with Analytic Geometry 1			
		14	9	17

SECOND YEAR
Fall Semester

EET 243W	Energy Conversions	4	3	5
EET 251	Electronic Circuitry	3	3	4
PHY 141	Physics	3	2	4
EET 267	Digital Electronics and Microprocessors I	3	2	4
		13	10	17

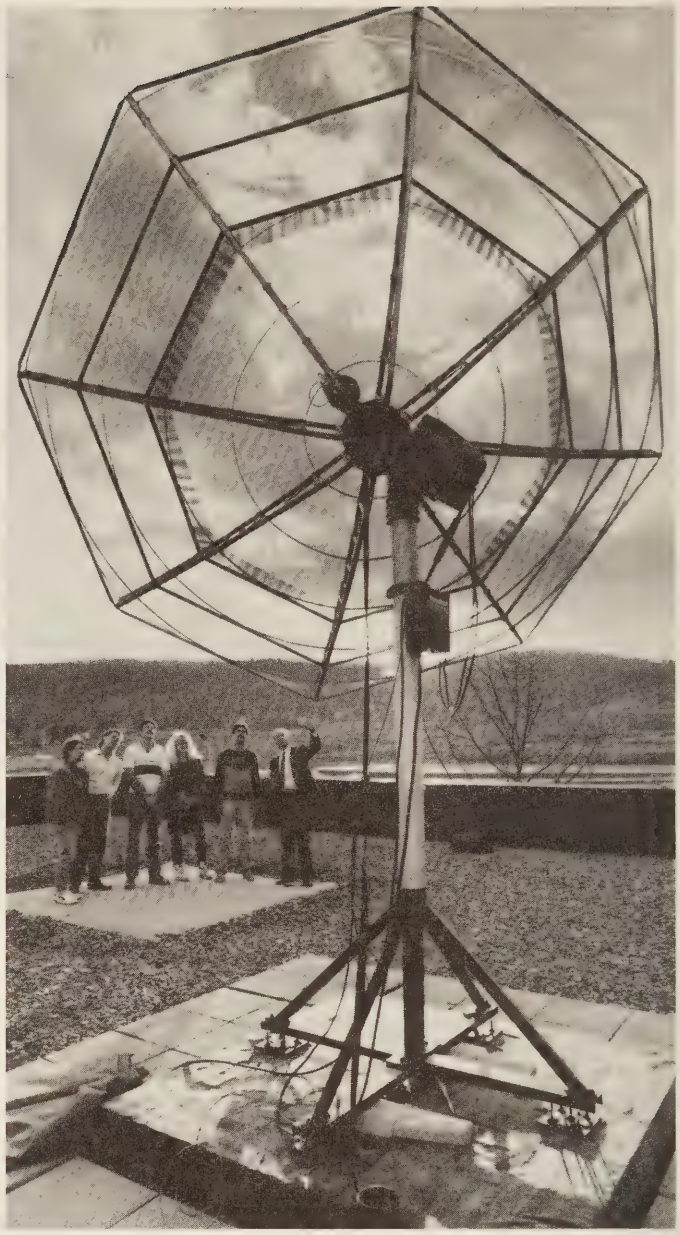
Spring Semester

EET 230	Electronic Design and Fabrication	0	3	1
EET 244	Control Systems	3	3	4
EET 252	Electronic Systems	3	3	4
PHY 144	Physics II-E	3	2	4
	Social Science Electives	6	0	6
		15	11	19

GRADUATION REQUIREMENT: 70½ CREDITS

*Students should consult with the department chairman or his designee to determine the appropriate mathematics courses.

W - Writing Emphasis Course



ENGINEERING SCIENCE

DEPARTMENT CHAIRPERSON, Jack Foster
ACADEMIC ADVISOR, William Beston
Applied Technology Building, Room 124
Telephone 771-5114

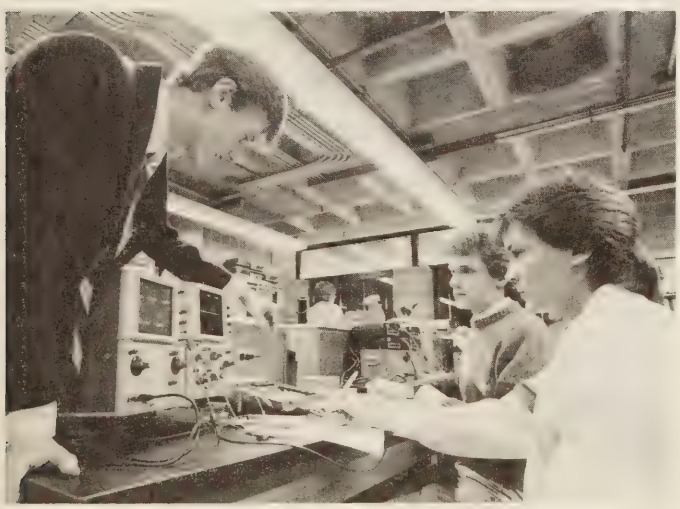
The Engineering Science curriculum is designed primarily to prepare graduates to continue their studies in the various engineering disciplines at four-year colleges and universities. The strong emphasis on mathematics and physics also allows graduates to transfer to these majors at four-year institutions, with junior-year standing. In addition, there are immediate employment possibilities for qualified graduates who wish to terminate or postpone further educational goals until a more opportune time.

Broome Community College is a member of the New York State Two-Year/Four-Year Engineering College Curriculum Study Committee. The purpose of this organization is to facilitate the transfer to four-year colleges, with junior-year standing, of two-year college graduates from engineering science programs. State University of New York at Binghamton, SUNY at Buffalo and SUNY at Stony Brook, Rensselaer Polytechnic Institute (RPI), Clarkson, Rochester Institute of Technology (RIT), Cornell, Syracuse and Union are among the members of the Study Committee who have agreed to give top priority to applicants with an A.S. degree in Engineering Science and who have been recommended by their department. Some students find it desirable to transfer out of state upon graduation. They, too, in most cases will transfer as full juniors and graduate with a Bachelor of Science in two more years. Broome Community College has an articulation agreement with Wilkes College in Pennsylvania and students have successfully transferred to places like Virginia Polytechnic Institute, Northwestern, Penn State, and the University of New Mexico. Feedback from these and other institutions to which Broome Community College students transfer indicates a high regard for the graduates and the quality of the Engineering Science program at BCC.

For students who wish to complete their education locally, Broome Community College and SUNY Binghamton have a cooperative admissions plan for entering freshmen. Students accepted in this program are guaranteed transfer to SUNY Binghamton as long as they maintain a grade point average of 3.00 at Broome.

Those graduates who prefer to seek immediate employment will find job opportunities as engineering technicians or as assistants to engineers involved in research and development. In addition, employment opportunities also exist which involve the application of mathematics and computer programming.

Students entering Broome Community College who wish to continue studying for their Bachelor's degrees in engineering, applied mathematics, or physics will find the Engineering Science program the most appropriate course of study. As a reasonable guideline for successful achievement in those rigorous programs, a students course work in high school should be above the 80% level in all areas. (See page 9 for specific requirements.)



FIRST YEAR
Fall Semester

			Hours per Week		Credits per
			Class	Lab	Semester
PED		Physical Education Elective	0	2	1
CHM	145	Chemistry	3	3	4
MAT	181	Engineering Calculus with Analytic Geometry I	4	0	4
EGR	150	Engineering Graphics	1	2	2
PHY	181	Engineering Physics I	3	2	4
ENG	110	Written Expression or Literature Elective	3	0	3
EGR	100	Orientation	3	0	0
			17	9	18

Spring Semester

CHM	146	Chemistry	3	3	4
EGR	151W	Applications in Engineering	2	2	3
MAT	182	Engineering Calculus with Analytic Geometry II	4	0	4
PHY	182	Engineering Physics II	3	2	4
		Social Science Elective	3	0	3
EGR	100	Orientation	3	0	0
			18	7	18

SECOND YEAR
Fall Semester

*EGR	281	Mechanics: Statics	3	0	3
EGR	285	Electrical and Electronic Circuits	3	0	3
EGR	287W	Engineering Science Laboratory I	0	3	1
MAT	281	Engineering Calculus with Analytic Geometry III	4	0	4
PHY	281	Engineering Physics III	4	0	4
		Social Science Elective	3	0	3
EGR	200	Orientation	2	0	0
			19	3	18

Spring Semester

*EGR	282	Mechanics: Dynamics	3	0	3
EGR	289	Introduction to Microprocessors	2	0	2
EGR	288	Microprocessor Laboratory	0	3	1
MAT	282	Differential Equations with Linear Algebra	4	0	4
		**Technical Elective	3	0	3
PED		Physical Education Elective	0	2	1
ENG	220	Communicating About Values or Literature Elective	3	0	3
EGR	200	Orientation	2	0	0
			17	5	17

*Organic Chemistry (CHM 245 and 246) may be substituted by students who are declared Chemical Engineering majors.

**Students who plan to major in Mechanical or Civil Engineering should select EGR 283 Strength of Materials. Students majoring in all other engineering fields should elect EGR 284 Materials Science.

W - Writing Emphasis course

GRADUATION REQUIREMENT: 71 CREDITS

MECHANICAL ENGINEERING TECHNOLOGY

DEPARTMENT CHAIRPERSON, William G. Kelly
Mechanical Building, Room 117
Telephone 771-5023

The continuing thrust for faster and more economical manufacturing methods, more reliable systems and the need for new, clean and consistent sources of energy has generated a continuing demand for mechanical engineering technicians with a high degree of technical competence.

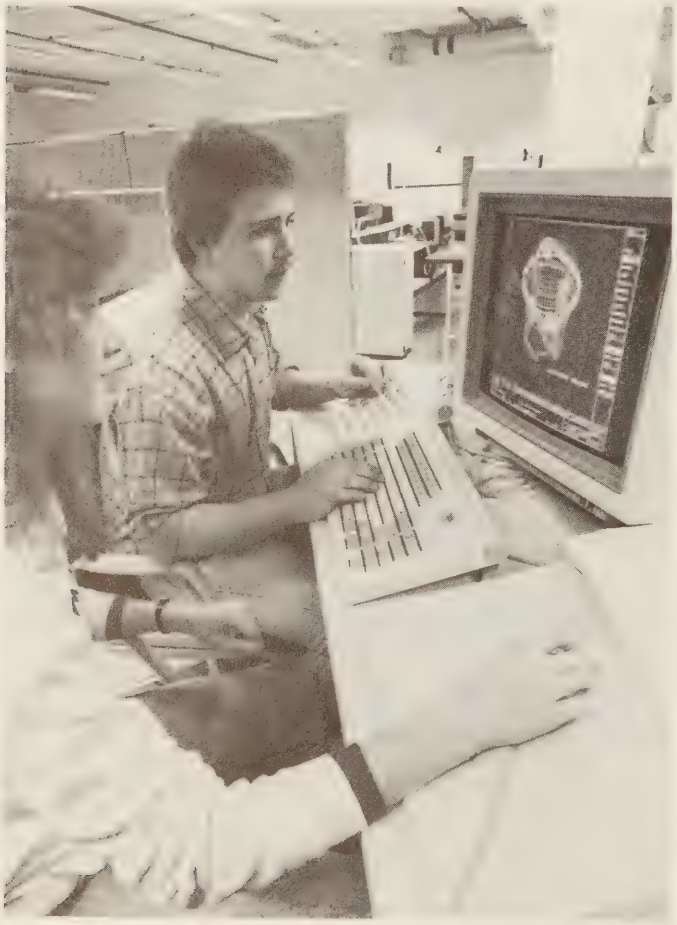
The curriculum outline of courses encompasses a blend of mathematics, science, English, social science and technical specialities conceived to generate the necessary background for a variety of entry positions that usually align closely with and support mechanical engineering or related functions.

Recent graduates have been employed in areas of design-drafting, product design, quality control, metallurgy, heat-power, purchasing sales, technical writing, system maintenance and computer-aided design. Job opportunities exist both locally and nationally, and starting salaries for 1988 graduates ranged from $16,300 to $20,300 with an average of $18,300.

Mechanical Engineering Technology is a particularly lucrative field for the female. Although few have ventured into the field, those who have are highly successful.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

State University of NY at Binghamton offers a TAC/ABET-accredited Bachelor of Technology program, for which the normal admission requirement is an AAS degree in an engineering technology discipline such as Mechanical Engineering Technology.



FIRST YEAR
Fall Semester

		Hours per Week		Credits per
		Class	Lab	Semester
MET 110	Introduction to Technology ...	1	0	.5
*MAT 161	Pre-Calculus	4	0	4
MET 113	Engineering Drawing I	1	2	2
MET 121	Manufacturing Processes I.....	2	2	3
†PHY 141	Physics I	3	2	4
ENG 110	Written Expression I	3	0	3
	Social Science Elective	3	0	3
		17	6	19½

Spring Semester

CST 122	Scientific Computer Programming - FORTRAN.....	2	2	3
MET 116	Engineering Drawing II w/CAD	1	2	2
MET 122	Manufacturing Processes II....	1	3	2
PHY 142	Physics II	3	2	4
MET 132	Applied Mechanics	4	0	4
ENG 150	Technical Writing	3	0	3
		14	9	18

SECOND YEAR
Fall Semester

EET 183	Electricity.....	2	3	3
*MAT 162	Applied Calculus I.....	4	0	4
MET 235	Strength or Materials	2	3	3
MET 243W	Fluid Mechanics.....	2	3	3
MET 263	Engineering Statistics, Quality Control	1	2	2
CAD 211	Computer Graphics	1	2	2
		12	13	17

Spring Semester

EET 186	Electronics	2	3	3
MET 238	Mechanical Design	3	3	4
MET 252	Engineering Materials and Industrial Processes	3	3	4
MET 244	Thermodynamics.....	2	3	3
	Social Science Elective	3	0	3
		13	12	17

*Or MAT 181-182 Calculus with Analytic Geometry I and II. Prior approval by department Chairperson required.

†Students entering the program without physics may elect to take PHY 100 Preparatory Physics I during the first semester in place of PHY 141 Physics. PHY 141 Physics may be taken during the spring semester and PHY 142 and MET 132 Applied Mechanics during the summer session. This will enable the student to graduate on schedule. PHY 100 Preparatory Physics is not applicable towards the degree.

W - Writing Emphasis Course

GRADUATION REQUIREMENTS: 71½ Credits



PART 3

PART-TIME STUDIES

MEETING MANY NEEDS

People often think that higher education is available only for recent high school graduates. Broome Community College tries to reach out and meet the educational needs of ALL the people in Broome County. "Community" is part of the College's name and a large portion of its mission.

Anyone in the community may enroll as a part-time student, and BCC attracts a large number each year. The fall 1988 part-time enrollment was nearly 3,000 men and women, most of them for evening classes. These are mostly people who also work during the day. In recent years, the College has also increased its enrollment of part-time day students, over 700 last fall. The College has a strong commitment to serving the part-time student.

PART-TIME STUDENTS

...are those who take fewer than 12 credits per semester, usually one or two courses. At BCC, part-time students can:

- Enroll in credit courses.
- Take day or evening courses, or both.
- Attend classes in the fall, spring or summer semester.
- Earn a degree or not, as they see fit. Certificate programs are also available.
- Apply for financial aid-if carrying 6 or more credits.
- Receive academic advising and personal counseling.
- Borrow books from the College library.
- Carry one, two or three courses.
- Receive Veteran's benefits.
- Transfer credits to BCC earned at another college.
- Participate in the College-on-the -Weekend

NOTE:

Many firms have a tuition-reimbursement plan that pays all or part of an employee's tuition and costs if his/her courses are job related. See your personnel office for more information.

The College conducts a special Information Session for new part-time students at the beginning of the fall and spring semesters to inform prospective students how to get started at BCC, what programs are available, and how to register. Contact the Information Center at 771-5150 for further details.

Part-time students seeking degrees are required to complete the College's General Education Program. Refer to p. 19 of this catalog, and seek guidance from your academic advisor or the Information Center for Evening and Part-Time Students.

CREDIT/DEGREE PROGRAMS FOR EVENING PART-TIME STUDENTS

Broome Community College offers 19 degree programs which can be completed through part-time study. Most of the courses in these programs can be completed in evening or weekend study. On the pages listed, are displays for the following degree programs. Additionally, the College sponsors several Certificate Programs. These are detailed on page 20.

Associate in Applied Science

1. Business (Accounting Emphasis) Page 80
2. Business (General Emphasis in Management and Marketing) Page 80
3. Early Childhood Page 82
4. Criminal Justice Page 83
5. Data Processing Page 72
6. Computer Technology Page 71
7. Fire Protection Technology .. Page 59
8. Individual Studies Page 59
9. Paralegal Page 61

Industrial Technology

10. Chemical Emphasis..... Page 84
11. Civil Emphasis Page 84
12. Electrical Emphasis..... Page 84
13. Mechanical Emphasis Page 85
14. Production Management..... Page 85

Associate in Arts

15. Liberal Arts and Sciences Page 82

Associate in Science

16. Computer Science..... Page 68-71
17. Liberal and General Studies Science Option Page 82
18. Liberal and General Studies-Mental Health Page 83
19. Individual Studies Page 59

ENROLLMENT

FIRST-TIME ENROLLMENT

Those enrolling as part-time students for the first time at Broome Community College should be aware of the following services available to them:

- Information Sessions
- Registration and Advisement
- Financial Aid
- Veterans Benefits
- Counseling Services
- Math and Writing Labs
- Tutoring Services

REGISTRATION IS REQUIRED. First-time students must register in person, by phone, or by mail. They must pay their tuition at the time they register in person, or when billed if registering by mail or phone.

RESIDENCY REQUIREMENTS. See page 16.

CONTINUED ENROLLMENT

Those who are continuing their studies at the College as part-time students should always keep in close touch with their academic advisors and follow the procedure shown for their program of study, so that they do not overlook any courses they should take.

They are also eligible for the financial aid and veterans benefits of first-time, part-time students, and they have to comply with the same residency requirements. They may advance register for courses or register by mail, phone, or in person. Tuition must be paid at the time of registration, if in person, or when billed if registering by mail or phone.

PLACEMENT TESTING. Part-time students are required to take placement tests in reading, writing and mathematics when they enroll in a degree program. The information gained from these tests will help you and your advisor select the best starting level of courses. Students who are not pursuing degrees may also benefit from the results of the test and are encouraged to contact the Learning Assistance Center (771-5038) or their advisor for testing information.

ADMISSION

PART-TIME DAY AND EVENING STUDENTS

To be admitted to a degree program at the College all students, including part-time day and evening students, must submit an admission application form to the Admissions Office (Wales, Room 102). Part-time students can be admitted to a degree program at any time.

Although part-time students can take courses without being admitted, it is generally in the student's interest to seek admission early in their studies. This will ensure more accurate and comprehensive advisement. Also, financial aid programs

require formal admission to a degree program.

ADVISEMENT

Academic advisement is available for all Broome Community College part-time and evening students through the Information Center located on the main floor of the Library, Room 101. The Center provides information and guidance to students requiring assistance. Academic advisors for each department are available during scheduled evening hours to accommodate student inquiries. Contact the Information Center to make arrangements for individual advisement sessions. Counseling services are also available Monday through Thursday evenings in the Wales Building, Room 200.

Evening Part-Time Students who are nearing the completion of their certificate or degree program must consult with their academic advisor to ensure that degree requirements are met.

Day Part-Time Students seeking advisement should contact the chairperson of their academic departments. They should also apply to their chairperson when they are ready to receive their associate degrees.

TUITION

Part-time students are those who carry fewer than 12 credit hours. Tuition and fees are listed on page 16.

FINANCIAL AID is available to part-time students who take 6 or more credits. Many companies have tuition reimbursement plans, and employees should familiarize themselves with their companies' policy. The College has a Financial Aid office in the Wales Building, Room 101 to answer questions about this. If one's company is paying, a letter to that effect should be brought to Students Accounts when the bill is due.

GRADUATION

Awards for degrees and certificates for part-time students at Broome Community College are conferred at the end of each semester. Students who expect to complete course requirements must declare their candidacy for graduation by filing a "Graduation and Degree Checkout Form" in the Registarar's Office by October 7 for the Fall term, February 5 for the Spring term, and June 3 for the Summer term. This will initiate an official review of academic records and a formal letter of candidacy. Forms may be obtained at the Registrar's Office during the day and the Information Center during the evening. Students should contact their advisor prior to the semester of graduation.

CREDIT FOR PRIOR LEARNING

TRANSFER CREDITS

- Courses completed at another college prior to enrolling at Broome Community College will be considered for transfer credits. The student, however must initiate the request for this consideration.
- An official transcript must be on file for all students - part-time or full-time - prior to transcript review for transfer purposes.

CREDIT FOR NON-ACADEMIC EXPERIENCE

Credit may be given for relevant experiential learning acquired in various contexts. A number of methods exist for receiving this credit, and details are available from the dean of the division in which one is pursuing a degree (See page 19).

Students may also find it advantageous to request credit by examination for a course in a field in which they have extensive knowledge and/or experience. By passing an examination, one can receive course credit. However, before being permitted to take an examination, students must satisfy a faculty committee as to their qualifications. Credit by examination is given only to matriculated students and a fee is charged.

SUMMER SESSION

Each summer Broome Community College offers three terms of summer sessions from 6 to 8 weeks long, in day and evening sections. An announcement of the Summer Schedule and policies is available in April of each year.

WEEKEND COURSES

In addition to a daily class schedule, the College also sponsors courses on Fridays and Saturdays. Schedules are printed each semester.

DISPLAY OF CREDIT PROGRAMS

Following are displays of courses for the programs that the College offers to part-time students. Most of these are given in the evening, although some are day offerings. Students who pursue these programs should meet with their academic advisors or program coordinators to determine the best approach to meeting their individual needs.

The displays of courses in each curriculum are divided into three categories to assist the student in determining which courses to take and in what order.

Category 1 - "Introductory Courses" are entry-level courses in each program. They are frequently prerequisites for courses that must be taken later.

Category 2 - "Additional Courses for Certificate" are those which together with the Introductory courses will satisfy the requirements for the curriculum certificate. The certificate is about the mid-point for the attainment of an associate degree.

Category 3 - "Remaining Courses for Degree" lists the additional courses required for the completion of the associate degree.

Students should always consult with their advisors, as sometimes special course consideration is possible.



HEALTH SCIENCES

DIETARY MANAGER
Leads to Certificate

This program is designed for individuals already employed in the food service field, as there is a requirement for supervised work experience by a Registered Dietitian. All persons entering the program are responsible for finding a preceptor, and registrations are on a pre-application basis.

			Credits
DIA	101	Nutrition	3
DIA	102	Institution Food Preparation	3
DIA	201	Food Management Systems	3
DIA	202	Personnel Management	3
Apply for Certificate - Dietary Manager			12

More Information:
Judy Komarinetz, Coordinator,
(Phone 771-5343)
Joseph K. Gay (Phone 771-5161)

ASSOCIATE IN APPLIED SCIENCE-BUSINESS



ACCOUNTING EMPHASIS

DEPARTMENT CHAIRPERSON, Richard Behr, 771-5008
ACADEMIC ADVISOR, Robert Newcomb 771-5008

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses			Credits
BUS	100	Accounting I	4
#BUS	112	Quan. Business Methods	3
BUS	118	Business Law I	3
BUS	141	Marketing	3
ENG	110	Written Expression I	3

Additional Courses for Certificate			
BUS	101	Accounting II	4
BUS	200	Intermediate Accounting I	4
BUS		Business Elective	3-4
CST	107	Bus Aplctn Micro Comp	3
		Social Science Elective	3
			33-34

Remaining Courses for Degree			
BUS	120	Business Law II	3
BUS	201	Intermediate Accounting II	4
BUS	205	Cost Accounting I	4
BUS	210	Managerial Accounting or	
BUS	206	Cost Accounting II	4
ENG	220	Communicating About Values	3
		* 2 Mathematics or Science Electives	6-8
SPK	102	Effective Speaking	3
Business Elective			3-4
ECO	110	Micro Economics	3
AAS-Business (Accounting Emphasis)			
		Total Credits	66-70

*Students who have passed Sequential Math III in high school will take MAT 145 Finite Mathematics. Those who have not passed it will take MAT 117 Elementary Finite Mathematics.

#Depending on mathematics entrance test scores and math background, the student will take: MAT 090A and QBM, or QBM, or Introduction to Business.

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

MANAGEMENT AND MARKETING EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses			Credits
BUS	100	Accounting I	4
BUS	101	Accounting II	4
#BUS	112	Quan. Business Methods	3
BUS	118	Business Law I	3
ENG	110	Written Expression I	3
BUS	141	Marketing	3

Additional Courses for Certificate			
BUS	259	Report Writing	3
Liberal Arts Elective			3
Business Courses			7
			33

Remaining Courses for Degree			
BUS	120	Business Law II	3
Business Courses			8
Business Related Courses (see below)			3
Social Science Elective			3
ENG	220	Communicating About Values	3
BUS	115	Business Statistics	3
PHS	111	Physical Science for Today	3
Math or Science Elective			3-4
ECO	110	Micro Economics	3
CST	107	Bus Aplctn Micro Comp	3
AAS in Marketing/Management			
		Total Credits	68-69

Suggested Management Electives: BUS 210, BUS 224, BUS 245, BUS 246, BUS 249, BUS 252, BUS 255, BUS 258, BUS 262, BUS 270.

Suggested Marketing Electives: BUS 110, BUS 129, BUS 131, BUS 135, BUS 152, BUS 154, BUS 229, BUS 238, BUS 262, BUS 264.

Business related courses choose from BUS, DOT, CST, TAE, MAT, MET.

NOTE: A number of choices exist in The Business - General Emphasis Program. By carefully selecting the proper Business courses, students can generate a concentration in a particular field, such as Sales, Retailing or Management. To identify these courses, students should discuss their interests with their academic advisor.

Business students who have taken courses through AIB, LOMA, or other recognized national programs of study and examination should apply to the Academic Advisor for consideration of credit.



COLLEGE
ON-THE-WEEKEND

College-on-the-Weekend is one way Broome Community College has responded to the needs of a growing number of non-traditional students. Many people wishing to continue their education just cannot find the time during the week. Even evening classes pose a problem for working parents raising families.

Now you can earn a degree, part-time, attending classes every third weekend—six weekends each trimester. You can take one, two or three classes per term and earn your Associates Degree in as little as 2½ years. Weekend students may start the program at the beginning of any trimester which begin in September, January and May of each year.

Take one, two or three courses and progress at your own pace. You can even combine College-on-the-Weekend with weekday evening courses at BCC and move along more rapidly. Now you can return to college on your terms—with a schedule that fits your lifestyle.

Presently BCC College-on-the-Weekend students may earn an Associate in Applied Science Degree in Business with an emphasis in Management and Marketing or Accounting.

Various courses will be scheduled each trimester to ensure that all students will be able to take all necessary courses during the fall, spring or summer terms. Students with business courses from other colleges should call about credit transfer.

WEEKEND SERVICES

All BCC student services will be available to College-on-the-Weekend students including:

- Financial Aid
- Learning Assistance Center
- Library Services
- Study Areas
- Lab Proctors
- Computers
- Lounge

LIBERAL AND GENERAL STUDIES

LIBERAL ARTS

ASSOCIATE IN ARTS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses	Credits
ENG as advised (110 or 110S and 220)	3
Liberal Arts Courses	6
Additional Courses for Certificate	
HIS 115	3
Approved Humanities	3
Approved Social Sciences	6
Approved Liberal Arts Courses	11
	32
Remaining Courses for Degree	
Remainder of degree requirements (see below)	30
AA Liberal Arts & Sciences Minimum Semester Credits	62

Minimum requirements for AA degree:
English—a minimum of 12 credits, of which 6 shall be in composition and 6 in literature.
History—a minimum of 6 credits in approved courses including HIS 115 Modern Global History.
Humanities—a minimum of 6 credits (6 in Philosophy or 6 in a foreign language).
Mathematics—students who have completed fewer than 3 units of secondary school mathematics (through 11th year math) are required to take 2 semesters of college level mathematics. • Students who have completed 3 units of secondary school mathematics (through 11th year math) are required to take one semester of college level mathematics. • Students who have completed more than 3 units of secondary school mathematics (including 11th year math) are not required to take additional math. They may, however, elect an appropriate math course or an elective in another field.
Natural and Physical Sciences—a minimum of 8 credits
Social Sciences—a minimum of 6 credits*
Electives—minimum of 16 credits (A maximum of 15 credits may be taken outside the offerings in Liberal Arts & Sciences with the approval of the Dean of Liberal Arts).
The Associate in Arts program is structured to allow the greatest flexibility in course selection and sequence. It is recommended that students begin with the requirement in Written Expression, which is 3 hours of ENG 110.

*Choose at least one from the following: ECO 110/111, HIS 130/131, POS 201/204, SOS 111/120/130, SOC 110/111.

More Information:
George Higginbottom, Liberal and General Studies Dean (Phone 771-5031)

ASSOCIATE IN SCIENCE

SCIENCE OPTION

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	Credits
Mathematics as advised	3-4
English as advised (110 or 110S)	3
Additional Courses for Certificate	
*2 Science Elective Sequences	16
HIS 115	3
†Mathematics	6-8
	32-34
Remaining Courses for Degree	
ENG 220 Communicating About Values	3
*2 Science Elective Sequences	16
LIT 200 and Elective	6
History Elective	3
#Social Science Electives	6
	34-36
AS degree in Liberal Arts Semester Credits	66-68

* "Sequences" in biology, chemistry, physics or physical science must be taken for each of these 2 science requirements. (Recommended: BIO 111, 112; BIO 151, 152; CHM 145, 146; PHY 161, 162; CHM 245, 246.) At least 8 hours must be at the 200 level.

#Courses to be chosen from ANT, ECO, POS, PSY, SOC, SOS designators. At least one must be from following: SOC 110/111, HIS 130/131, SOS 111/120/130, POS 201, ECO 110/111.

†If the Calculus and Analytic Geometry requirement was met the first year, electives must be Philosophy (6) or Foreign Language (6-8). Higher level math can only be elected by approval of Dean if transfer needs require it.

Students who have not passed Advanced Algebra or its equivalent in high school (usually 3 ½ - 4) high school units) should take Algebra and Trigonometry or Pre-Calculus the first year followed by a year of Calculus with Analytic Geometry in the second year. Only if students have the equivalent of Calculus with Analytic Geometry upon entry can they take the non-math elective.

More Information:
George Higginbottom, Liberal and General Studies Dean (Phone 771-5031)

Students must fulfill General Education requirements. See page 19.

A.A.S.-EARLY CHILDHOOD

SUGGESTED SEQUENCE For Part-Time Students: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	Credits
PSY 110 General Psychology	3
PSY 211 Child Development	3
CDC 100 Introduction to the Education of Young Children	3
ENG 110 Written Expression I	3
CDC 120 Curriculum Development	3
Additional Courses for Certificate	
SOC 110 Introduction to Sociology	3
CDC 245 Social Development of Young Children	3
Child Care Electives (see list below)	9
	30
Remaining Courses for Degree	
ENG 220 Communicating About Values	3
Humanities Elective (see list below)	3
Math or Science Elective (see list below)	6-8
Child Care Electives (see list below)	3
CDC 170 Practicum I ("W" Emphasis Course)	3
CDC 290 Practicum II	6
Related Approved Electives (see list below)	6
	30-32
AAS Child Care Minimum Semester Credits	60-62

More Information:
Francis J. Short, Chairperson or
Marilyn Schafer, Program Coordinator
(Phone 771-5029 or 771-5087).

CDC Electives:
Students may select 12 hours of courses designated for Child Care, such as CDC 115, CDC 140, CDC 150, CDC 160, CDC 210, CDC 220, CDC 230, CDC 250, LIT 263, THR 117, THR 201

Related Electives:
Students may elect 6 hours from the Related Approved Electives from the Following: PSY 103, PSY, 212, PSY 214, PSY 217, PSY 220, PSY 227, SOC 230, SOC 210, SOC 234; or from other disciplines with permission.

Elective Areas:
Suggested Humanities - select from English, Languages, Fine Arts, Philosophy, Speech

Math or Science - select from Math, Biology, Chemistry, Physics, Physical Science (MAT 113, MAT 114, BIO 131, CHM 120 recommended).

Students must fulfill General Education requirements. See page 19.

A.A.S.-CRIMINAL JUSTICE

This program is designed for individuals considering employment upon graduation or for those already employed in the Criminal Justice field. Students intending to transfer for advanced degrees are advised to pursue the Criminal Justice option in Liberal Arts (see page 63).

SUGGESTED SEQUENCE For Part-Time Students: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses			Credits
ENG	110	Written Expression I	3
SOC	110	Introduction to Sociology	3
CRJ	105	Corrections	3
CRJ	101	Intro. to Criminal Justice	3
Additional Courses for Certificate			
PSY	110	General Psychology	3
SPK	102	Effective Speaking	3
POS	201	Introduction to American Government or	
POS	204	American State & Local Government	3
Sociology Elective			3
Psychology Elective			3
CRJ	125	Penal Law	3
CRJ	212	Criminal Procedure/ Constitutional Law ("W" Emphasis Course)	3
			33
Remaining Courses for Degree			
ENG	220	Communicating About Values	3
Lab Science or Math or Combination			6
SAC	295	Seminar in Human Potential or	
SAC	101	Individual in a Changing Environment or	
PSY	100	Psychology of Personal Adjustment	3
Philosophy Elective (PHI 201 or 206 recommended)			3
Free Electives (any field: Social Science recommended)			3
CRJ	115	Juvenile Justice	3
CRJ	215	Police Administration or	
CRJ	230	Criminal Investigation	3
Criminal Justice Elective			6
AAS Criminal Justice Minimum Semester Credits			60

Credit for academy training will be considered after admission to candidacy on the basis of about one credit per 40 or one credit per 50 contact hours, with option to receive transfer credit for other Criminal Justice related programs up to 12 credits total. The requirement will be that the individual must provide documentation of attendance and relevancy of work.

More Information:
Coordinator, Richard Fitzpatrick,
Phone 771-5029
Francis J. Short, Chairperson, Phone 771-5087

MENTAL HEALTH AND RETARDATION EMPHASIS

SUGGESTED SEQUENCE; Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses			Credits
ENG	110	Written Expression I	3
PSY	110	General Psychology	3
MAT		Mathematics (MAT 124 Statistics recommended)	3
HIS	115	Modern Global History	3
Additional Courses for Certificate			
LAB Science Sequence (BIO 111 or 131 recommended)			4
		Liberal Arts Elective	3
SOC	110	Introduction to Sociology	3
PHI		Philosophy Elective	3
PSY	214	Abnormal Psychology	3
PSY	217	Counseling Theory and Practice	3
			31
Remaining Courses for Degree			
LAB Science Sequence (BIO 112 or 132 recommended)			4
PSY	223	Intelligence and the Mentally Retarded	3
SOS	290	Social Science Field Work	3
PSY	227	Behavior Modification	3
ENG	220	Communicating About Values	3
Approved Electives in Mental Health & Retardation Emphasis (see page 56)			6
LIT	200	Introduction to Literature	3
SOC	250	Introduction to Social Work	3
HIS	186	Modern American Social History	3
MAT		Math as advised	3
			34
AS in Liberal Arts (Mental Health & Retardation Emphasis) Minimum Semester Credits			65

More Information:
Margherita Rossi, Program Coordinator
(Phone 771-5094)

Students must fulfill General Education requirements. See page 19.

LIBERAL ARTS & SCIENCES
General Studies Emphasis Leads to Certificate

	Credits
English	3
Social Sciences & Humanities	15
Math/Science	12
Liberal Arts Certificate (General Studies Emphasis)	30

The awarding of the certificate does not necessarily mean that the student is a candidate for the Associate in Arts degree. Courses must have approval of the Liberal and General Studies Division to insure that work is appropriate to the Associate in Arts Degree.

More Information:
George Higginbottom, Liberal and General Studies Dean, Phone 771-5031

INTERIOR DESIGN
Leads to Certificate

This is a credit program for individuals interested in a career in interior design or those currently employed in home furnishings or design related fields who would like to obtain greater knowledge and expertise. Those whose interests in design are not job-related are also encouraged to enroll.

Full-time Liberal Arts students are referred to the Design Arts Model for the A.A. degree on page 63.

			Credits
ART	101	History of Western Art	3
ART	105	Introduction to Design	3
INT	101	History of Architecture-Exterior and Interior	3
*INT	110	Interior Design I	4
*INT	111	Interior Design II	4
INT	122	Professional Practice	3
ART	150	Graphic Rendering	3
INT	105	Basic Drawing	3
BUS	262	Small Business Management	3
INT	140	Fabric Analysis	2
		Total	31

*These courses have prerequisites

More Information:
Robert Keller, Program Coordinator,
(Phone 771-5075)

ASSOCIATE IN APPLIED SCIENCE - INDUSTRIAL TECHNOLOGY

CHEMICAL EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	Credits
MAT 139 Algebra	4
CHM 145 Chemistry	4
English Electives (see list below)	3
Additional Courses for Certificate	
CHM 146 Chemistry	4
CHM 291 Organic Chemistry I	3
CHM 292 Organic Chemistry II	3
PHY 141 Physics	4
MAT 140 Trigonometry	4
CST 122 Computer Programming-FORTRAN	3
	32
Remaining Courses for Degree	
PHY 142 Physics	4
CHM 293 Analytical-Instrumental Chemistry I	3
CHM 294 Analytical-Instrumental Chemistry II	3
English Electives (see list below)	3
Social Science Electives (see list below)	6
Approved Technical Science Electives (see list below)	13
AAS Industrial Technology (Chemical Emphasis) Minimum Semester Credits	64

The following may be taken as approved technical/science courses to meet degree requirements: MAT 162, MAT 181, MAT 182, MAT 264, EET 111, EET 112, EET 125, EET 126, MET 261, CST 113, CST 126, CST 150, CST 170, CST 202, CST 205, CST 211, CST 220, CST 222, CST 225, BIO 111, BIO 112.

Suggested English Courses:
ENG 110, ENG 120, ENG 150, SPK 102

Suggested Social Science Courses:
ECO 104, ECO 110, ECO 111, PSY 100, PSY 110, SOC 110, SOS 120, SOS 130.

CIVIL EMPHASIS

In Industrial Technology (Associate in Applied Science Degree)

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	Credits
MAT 139 Algebra	4
MAT 140 Trigonometry	4
ENG 110 Written Expression I	3
PHY 141 Physics I	4
Additional Courses for Certificate	
MET 132 Applied Mechanics	4
MET 113 Engineering Drawing I	2
CIV 159 Architectural Drafting	3
CAD Elective	3
CST 122 Computer Programming - FORTRAN	3
CAD 150 Basic CADAM	2
	32
Remaining Courses for Degree	
PHY 142 Physics II	4
MET 235 Strength of Materials	3
ENG 150 Technical Writing	3
Social Science Electives (see list below)	6
CAD Elective	3
Approved Technical Electives * (see list below)	13
AAS Industrial Technology (Civil Emphasis) Minimum Semester Credits	64

*The following may be taken as approved technical elective courses to meet the degree requirements: CIV 111, MAT 162 or MAT 181, CIV 160, CIV 216, CIV 217, CIV 224, CIV 226, CIV 228 or CIV 231, CIV 238, CIV 240, CIV 268.

Suggested Social Science Courses: ECO 110, ECO 111, SOC 110, PSY 110, ECO 104, PSY 100, SOS 111, SOS 120, SOS 130.

*Students should note that specialty courses like Surveying, Materials Testing and Steel and Reinforced Concrete Design are generally only offered during the day. Students should carefully review the effect of this scheduling on their academic plans.

ELECTRICAL EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses	Credits
MAT 139 Algebra	4
MAT 140 Trigonometry	4
EET 125 Circuits I	3
ENG 110 Written Expression I	3
Additional Courses for Certificate	
EET 126 Circuits II	3
EET 255 Electronics I	4
MET 113 Engineering Drawing	2
CST 122 Computer Programming - FORTRAN (Technical)	3
Social Science Elective (see list below)	3
Approved Technical Electives (see list below)	3
	32
Remaining Courses for Degree	
EET 235 Electrical and Electronics Drawing	2
EET 245 Energy Conversions and Control Systems	4
EET 256 Electronics II	4
EET 257 Electronics III	4
EET 267 Digital Electronics & Microprocessors I	4
PHY 141 & PHY 142 Physics	8
ENG 150 Technical Writing	3
Social Science Elective (see list below)	3
AAS Industrial Technology (Electrical Emphasis) Minimum Semester Credits	64

Approved Technical Electives:
EET 111, EET 112, EET 268, MAT 124, MAT 181, MAT 182, MAT 264, MET 243, MET 132, MET 244, MET 246, MET 253, MET 263, MET 280, MET 285, MET 286, CIV 228, CIV 268, CIV 155, CHM 145, CHM 146, CST 115, CST 126, CST 130, CST 150, CST 200, CST 201, CST 202, CST 222, CAD 150, CAD 151, CAD 210, CAD 222, CAD 230, CAD 250.

Suggested Social Science Courses:
ECO 104, ECO 110, ECO 111, PSY 100, PSY 110, SOC 110, SOS 120, SOS 130.

Courses in the fast changing engineering technologies such as Electronics, Computers, Energy Conversions and Control Systems and Machine & Controls, can not be used for degree requirements if they were taken more than 5 years prior to graduation date. One exception to this rule would be the student who has been in the degree program for a number of years and has taken at least one required course every fall and spring semester.

MECHANICAL EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses	Credits
*MAT 139 Algebra	4
*MAT 140 Trigonometry	4
MET 113 Engineering Drawing I	2
English Elective (see list below)	3
Additional Courses for Certificate	
MET 121 Manufacturing Processes I	3
MET 122 Manufacturing Processes II	2
PHY 141 Physics	4
CST 122 Computer Programming - FORTRAN	3
MET 132 Applied Mechanics	4
Approved Technical Electives (see list below)	3
	32
Remaining Courses for Degree	
MET 235 Strength of Materials	3
MET 253 Engineering Materials & Industrial Processes	3
MET 263 Engineering Statistics & Quality Control	2
PHY 142 Physics	4
English Elective (see list below)	3
Social Science Electives (see list below)	6
Approved Technical Electives (see list below)	11
AAS Industrial Technology (Mechanical Emphasis) Minimum Semester Credits	64

The following may be taken as approved technical elective courses to meet degree requirements:
CAD 151, CAD 211, CAD 212, CAD 213, CAD 214, CAD 222, CAD 230, CAD 253, CAD 254, MET 116, MET 125, MET 223, MET 238, MET 243, MET 244, MET 280, MET 285, MET 286, MET 287, EET 111, EET,112, EET 125, EET 126, EET 255, EET 256, EET 257, CIV 159, CIV 160, CHM 145, CHM 146, MAT 181, MAT 182.

Suggested English Course:
ENG 110, ENG 120, ENG 150, SPK 102.

Suggested Social Science Course:
ECO 104, ECO 110, ECO 111, PSY 100, PSY 110, SOC 110, SOC 130, SOS 111, SOS 120, SOS 130.

*Must have a minimum of 4 hours of Mathematics as a requirement for the degree if background makes it unnecessary to take MAT 139 Algebra and MAT 140 Trigonometry.

PRODUCTION MANAGEMENT EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses	Credits
*MAT 139 Algebra	4
*MAT 140 Trigonometry	4
MET 113 Engineering Drawing I	2
English Elective (see list below)	3
Additional Courses for Certificate	
MET 121 Manufacturing Processes I	3
MET 122 Manufacturing Processes II	2
PHY 141 Physics	4
BUS 255 Industrial Labor Relations	2
MET 280 Management Decisions	2
MET 285 Time, Motion & Wage Study	2
Approved Electives (see list below)	4
	32
Remaining Courses for Degree	**Credits**
CST 122 Computer Programming -FORTRAN (Technical)	3
BUS 252 Supervision of Personnel	2
MET 263 Engineering Statistics & Quality Control	2
MET 286 Production Control	2
MET 287 Plant Layout & Materials Handling	2
PHY 142 Physics	4
English Elective (see list below)	3
Social Science Electives (see list below	6
Approved Electives (see list below)	8
AAS Industrial Technology (Production Management Emphasis) Minimum Semester Credits	64

*Must have a minimum of 4 hours of Mathematics as a requirement for the degree if background makes it unnecessary to take MAT 139 Algebra and MAT 140 Trigonometry.

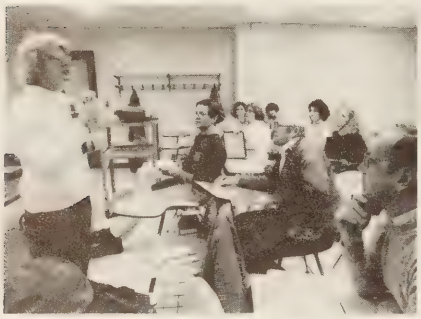
The following may be taken as approved courses to meet degree requirements:
MET 116, MET 125, MET 132, MET 223, MET 235, MET 238, MET 243, MET 244, MET 253, EET 111, EET 112, EET, 125, EET, 126, CIV 159, CIV 160, BUS 118, BUS 154, BUS 243, MAT 181, MAT 182, CAD 151, CAD 211, CAD 212, CAD 213, CAD 214, CAD 222, CAD 253, CAD 254.

Suggested English Courses:
ENG 110, ENG 120, ENG 150, SPK 102.

Suggested Social Science Courses:
ECO 104, ECO 110, ECO 111, ECO 120, PSY 100, PSY 110, SOC 110, SOS 111, SOS 120, SOS 130.

CENTER FOR COMMUNITY EDUCATION

Broome Community College has an extensive non-credit community education program of courses, seminars and special events. The program receives about 10,000 registrations each year in its open enrollment programs, serving the community's career development, cultural, and recreational needs.



Career Development

This category consists of courses and seminars designed to update professional skills or introduce participants to new career areas. Included are Computer Center offerings, the Management Institute, the BCC Police Academy, and other programs.

Corporate Service

The Corporate Service Program at Broome Community College is designed to demonstrate the College's commitment to local economic development. The Program's principle mission is to produce quality education and training packages for area corporations.

Course content, materials and presentations are tailored to fit the unique needs of each client. Classes may be scheduled during the more traditional day or evening hours or around the specific shift schedules of the company. Most employee training programs can take place on the employer's premises, thus minimizing lost employee work time.

Course topics include communication skills, management seminars, safety training, technical programs and personal planning programs.

For additional information on contract education programs, call the Corporate Service Program in the Center for Community Education (771-5056).

Leisure Time Mini Courses

These are short term courses designed to explore a variety of personal interests. Programs include a hobby and craft center, personal development courses, financial courses, defensive driving, languages, and a variety of special events.

College for Kids

One of the most popular credit-free areas is a program specially designed for kids - from elementary schoolers to high school students. Regular offerings include:

- Hobbies and crafts for kids
- Study skills
- SAT preparation

Generally these short term offerings are scheduled on Saturday mornings throughout the year.

Conferences and Seminars

The College conducts workshops and seminars in a variety of topics throughout the year. These are intended to update job skills and explore new fields of interest. Some of the seminars have been for law-enforcement personnel, women seeking jobs and educational information, community agencies, and business and industry employees.

Tour Programs

The College regularly sponsors a variety of charter tours to places such as N.Y. City, Boston, Canada, etc.

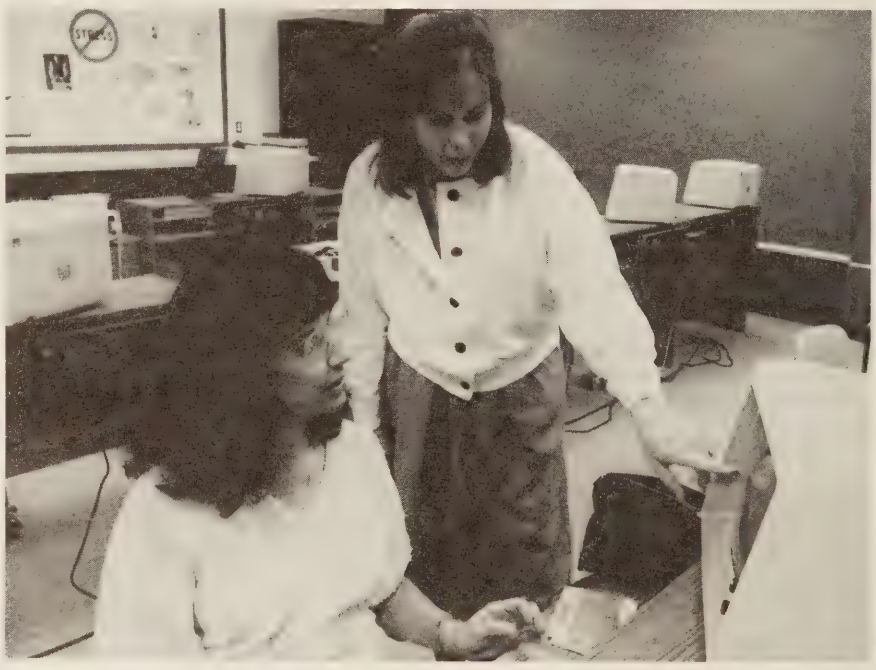
Registration

Community Education Programs are offered continuously throughout the year. Free catalogs list the courses, with their descriptions, times, dates, fees. A form is included in each term's catalog for easy mail-in registration. Registrations are accepted on a first-come, first-served basis.

Course Development

Programs are a joint effort between Broome Community College faculty, community people, area agencies, organizations and business firms. Groups interested in teaching or co-sponsoring a course are encouraged to discuss the possibilities with the College's Center for Community Education. Many programs offered each year come about because someone suggested them, or a group was concerned about a real need in the community. A teaching interest and course proposal form is available for individuals wishing to teach a particular subject. These forms will be mailed upon request. Call 771-5056.







PART 4

COURSE DESCRIPTIONS

The offering of any course is subject to sufficient enrollment. Courses numbered from 100 to 199 are generally first-year courses, and those numbered in the 200's are usually taken in the second year. The number of credits listed for each course is for a semester, while the number of class hours and laboratory hours is for a week, unless otherwise states. Courses are listed in alphabetical order by department.

ANTHROPOLOGY

ANT 110 Physicial Anthropology and Archaeology **3 Credits**
Introduction to human evolution, variation and prehistory. The Darwinian Revolution, mechanisms of evolution, the fossil record, domestication of plants and animals, the rise of civilization. Prehistory topics may include Americas, Africa, Middle East, Asia. (Not offered in 1988-89.)
3 Class Hours

ANT 111 Cultural Anthropology **3 Credits**
Introduction to the study of culture as the behavioral adaptation unique to human societies. Cultural characteristics shared by all humans and major variations found among specific groups. Explanations for rules of social interaction in common activities, the social functions of institutions such as marriage and kinship, the ecological basis of many institutions, language as a culturally defined system of communication, modernization in our own and third world societies.
3 Class Hours

ANT 299 Independent Study **1-3 Credits**
An individual student project in anthropology which is beyond the scope of requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.
Prerequisite: 3 semester hours in Anthropology

ART

ART 101 History of Western Art **3 Credits**
Basic art principles and concepts together with their historical development as shown in representative works of painting, sculpture and architecture. Gallery visits.
3 Class Hours

ART 105 Introduction to Two Dimensional Design **3 Credits**
Introduction to design involves the student with investigation of visual perception and organization. The student is expected to become more fully equipped to understand and work with design concepts through heightened physical and sensory awareness, experimentation with a variety of media and intellectual comprehension of text, lecture and visual examples. Line space, illusion, texture, color and form are explored.
2 Class Hours, 2 Studio Hours

ART 106 Introduction to Three-Dimensional Design **3 Credits**
Developing sensitivity and awareness of our spatial environment is the objective of this course. Aesthetic and functional elements of three dimensional design are explored. Through reading, projects, lectures and field trips, techniques are explored to assist in heightening awareness. This enables the student to understand the functional and aesthetic examples of the three dimensional environment. Emphasis is placed on studio projects.
2 Class Hours, 2 Studio Hours

ART 115 Drawing **3 Credits**
Intensive drawing instruction in charcoal, pencil, pen and ink, pastel and mixed media, life drawing, still-life composition.
6 Studio Hours

ART 116 Painting I **3 Credits**
Beginning painting instruction and practice of oil painting, still-lifes, landscapes.
6 Studio Hours
Prerequisite: ART 115 Drawing or portfolio review.

ART 130 Pottery **3 Credits**
Study of the basic processes of the design and creation of ceramics, both functional and sculptural. Fundamentals of hand-building, potter's wheel, glazing and firing.
6 Studio Hours

ART 140 Printmaking **3 Credits**
Three equal parts to course — linecut, woodcut, monotype. Explanation, uses, technical demands, potential and limitation of each process. Students to develop images for blocks or plates.
6 Studio Hours

ART 150 Graphic Rendering **3 Credits**
Computer aided graphic techniques for visual presentation of architectural, industrial and aesthetic forms. Studio projects stress creation of the representational image using perspective, color, texture and light. Applicable to advertising and illustration of ideas and products.
2 Lecture Hours, 2 Lab Hours
Prerequisite: ART 105 Introduction to Two Dimensional Design

ART 215 Painting II **3 Credits**
Continuation of painting instruction and practice done in ART 116 Painting I.
6 Studio Hours
Prerequisite: ART 116 Painting I or portfolio review.

ART 216 Painting III **3 Credits**
Painting from costumed models; advanced composition devices.
6 Studio Hours
Prerequisite: ART 215 Painting II or portfolio review.

ART 217 Advanced Drawing **3 Credits**
Advanced course presenting new media techniques and concepts; in-depth studies of projects encountered in ART 115.
6 Studio Hours
Prerequisite: ART 115 Drawing or portfolio review.

Independent Study: Art **1-3 Credits**
ART 296 Printmaking
ART 297 Sculpture
ART 298 Studio Art
ART 299 Art History
An individual student project concerned with advanced work in a specific area of art. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.
Prerequisite: 3 semester hours of college level work in Art.

BANKING

BNK 120 Sales Management **1 Credit**
Designed for new and prospective retail managers. Examines the responsibilities of the sales manager. Selling techniques, establishing market goals and increasing sales results.
1 Class Hour

BNK 121 Retail Management **1 Credit**
Designed for the new and prospective retail manager. Examines the skills necessary to be successful in the retail bank environment, communication, leadership, time management, problem solving and decision making.
1 Class Hour

BNK 122 Financial Performance of Banks **1 Credit**
Designed for new and prospective retail managers. Examines bank's earning power, how to manage for profitability, decisions that affect profitability.
1 Class Hour

BNK 130 Written Communication for Bankers **1 Credit**
An overview of the steps involved in creating successful written communications. Emphasis on letters and written reports.
1 Class Hour

BNK 140 Statement Analysis **3 Credits**
Basic concepts and skills of statement analysis. Examination of ratio analysis, trend analysis, fund and cash flow analysis. Pro forma statements, peak debt position, cash forecasting and working capital analysis are also covered.
3 Class Hours

BNK 150 Customer Service for Bank Personnel **1 Credit**
For customer contact personnel, this practically based course provides an opportunity to improve communication skills as they relate to banking needs. Included are elements of professionalism, handling difficult situations, and interpersonal communication skills.
1 Class Hour

BNK 160 Personal Banker **½ Credit**
Designed for customer-contact personnel. Examines customer needs at various stages of life and develops strategies designed to meet those needs.
½ Class Hours

BNK 161 Financial Planning For Bankers **3 Credits**
Designed for all levels of bank personnel, this course will provide a general overview of the financial planning process and its applications. Application of financial planning concepts to personal financial decisions.
3 Class Hours

BNK 162 Deposit Operations **2 Credits**
Examines the U.S. payment system of today and tomorrow. Bank deposit-taking activities, management of deposited funds, trends in EFT.
2 Class Hours

BNK 163 Essentials of Banking **½ Credit**
Orientation to the essential principles, concepts and operations of banking. Economic and organizational aspects of banking, the asset/liability management process, bank products and service.
½ Class Hour

BNK 164 Personnel and The Law **½ Credit**
An introduction to laws pertaining to banking's personnel policies and procedures. Civil Rights Act, Equal Pay Act, EEO, Vietnam Era veterans' legislation.
½ Clas Hour

BNK 165 Bank Security **½ Credit**
Designed for experienced customer-contact personnel. Examines bank security issues - bank card fraud, bomb threats, extortion, embezzlement.
½ Class Hours

BNK 168 Principles of Banking **3 Credits**
A core course that examines all aspects of banking. A comprehensive introduction to today's diversified bank services. Bank accounting, pricing, profitability, personnel and security functions.
3 Class Hours

BNK 171 Bank Cards **3 Credits**
A thorough overview and update of the bank card industry. History and development of the card, operational aspects, legal and regulatory issues, and implications for the future of the card are discussed in depth.
3 Class Hours

BNK 172 Real Estate Finance For Bankers **3 Credits**
An introductory course highlighting sources of mortgage credit. Analysis of mortgage credit and real estate investment. Appraisal of residential and income producing property, construction loan administration, and federal assistance in the mortgage market.
3 Class Hours

BNK 173 Marketing for Bankers **3 Credits**
A thorough examination of basic marketing principles and practices and their application to the banking industry. Designed for entry level through mid-management level employees.
3 Class Hours

BNK 174 Money & Banking **3 Credits**
Basic economic principles as they relate to banking. This course, designed for bank personnel in customer contact positions, management trainees, and mid-management entry personnel, provides the foundation for further banking study.
3 Class Hours

BNK 175 Consumer Credit Analysis **3 Credits**
Designed for those who understand the basics of consumer lending, this course provides specific training on the many aspects of making a consumer loan. Legal and regulatory issues, credit application and investigation, loan interviewing, documentation, credit decision considerations.
3 Class Hours

BNK 176 Law and Banking Principles **3 Credits**
Sources and applications of banking law. Torts and crimes, contracts, real and personal property, bankruptcy, legal implications of consumer lending.
3 Class Hours

BNK 178 Inside Commercial Banks **3 Credits**
Designed for all levels of bank personnel, this course offers an overview of major issues facing banking today. Examined are the current competitive, regulatory, technological, and market related developments affecting commercial banking.
3 Class Hours

BNK 179 Management Fundamentals/Banking **3 Credits**
The art and science of management centered around the basic management function of planning, organizing, leading, and controlling. A student oriented format utilizing case studies and discussion.
3 Class Hours

BNK 181 Investment Basics and Beyond **3 Credits**
Introductory course for trust department and retail bank personnel. The securities market, investment alternatives, and trust department investment operations are examined in detail. Also covered are investment techniques, portfolio management, and practical applications.
3 Class Hours

BNK 182 Consumer Lending **3 Credits**
Designed for entry level and consumer credit personnel. An overview of consumer credit. Evaluating credit risks, consumer credit policy, servicing and collecting loans, consumer compliance, documentation, portfolio management, and marketing.
3 Class Hours

BNK 185 Corporate Banking **3 Credits**
A pragmatic approach to understanding the lending environment within a bank. The course provides the less experienced commercial lender with a firm grasp of the sequential nature of the lending process. Emphasis is on a practical, technical approach.
3 Class Hours

BNK 186 Preparing For Supervision **1 Credit**
For the bank employee considering the move to a supervisory role, knowledge and practice in areas such as leadership, motivation, productivity, and communication.
1 Class Hour

BNK 187 Bank Letters and Reports **3 Credits**
Methods and skills of business communication as it relates to the bank environment. Examination of the form and format of a variety of bank letters and reports. Practical experience in effective business writing and discussion of common errors.
3 Class Hours

BNK 188 Knowing The Market **1 Credit**
For new and prospective retail managers, a look at changing bank culture in an era of high technology. Identifying bank and non-bank competition, market segmentation, and target market.
1 Class Hour

BNK 190 Problem Loans **3 Credits**
Problem loan prevention is stressed by examining common mistakes which cause problem loans. Effectively dealing with problem loans and minimizing losses examined through the use of case studies.
3 Class Hours

BNK 191 Selling Skills for Bankers **1 Credit**
An examination of the skills necessary for customer contact personnel to sell bank services and meet customer needs. Development of specific selling techniques and positive attitude.
1 Class Hour

BNK 192 Bank Management **3 Credits**
For all levels of bank management this course presents a discussion of bank financial statements, an overview of asset liability management and a thorough discussion of deposit functions, lending short-term funds management and capital management.
3 Class Hours

BNK 196 Quality Customer Service — 1 Credit
For customer contact personnel. Communications, establishing contact, exploring customer needs, defining and resolving problems, and closing the encounter.
1 Class Hour

BNK 197 Professional Teller Training — 1 Credit
Basic skills and information needed to perform effectively as a teller. Cash and check handling, other transactions, balancing and settling.
1 Class Hour

BNK 198 Law and Banking: Applications — 3 Credits
An introduction to laws pertaining to secured transactions, letters of credit, and the bank collection process. Check losses, collateral, perfection, and default.
3 Class Hours

BNK 199 Analyzing Financial Statements — 3 Credits
For the bank lender/credit analyst. How financial data is generated and its limitations. Flow of business funds, selecting and interpreting financial ratios.
3 Class Hours
Prerequisite: BUS 100 Accounting I and BUS 101 Accounting II

BIOLOGY

BIO 102 Preparatory Biology — 2 Credits
A preparatory course for students with no previous biology or laboratory science experience and for students needing additional background. Especially for prospective health science students. Register with advisement only.
3 Lecture Hours, 3 Laboratory Hours

BIO 111 General Biology I — 4 Credits
Principles of evolution and ecology as unifying themes in biology. Evolutionary processes and ecological adaptations illustrated by plant and animal diversity. Cellular life processes. Current environmental problems. The laboratory includes physically demanding field trips.
3 Class Hours, 3 Laboratory Hours

BIO 112 General Biology II — 4 Credits
Principles of evolution and ecology as unifying themes in biology. The human animal and its systems. Concepts of animal behavior. Classical genetics, current concepts of gene function and human genetics. Organismal growth and development. Current environmental problems. The laboratory includes physically demanding field trips.
3 Class Hours, 3 Laboratory Hours

BIO 120 Human Sexuality — 3 Credits
Explores information about sexual attitudes, relationships, sexual anatomy, contraception, sexually-transmitted disease, sexual physiology and dysfunction. Course aims to make students feel more comfortable thinking and talking about sex and to prepare them to make rational decisions about this important aspect of their lives.
3 Class Hours

BIO 131 Human Biology I — 4 Credits
Normal structure (gross and microscopic) and function of the skeletal, muscular and nervous systems. Emphasis on physiology in lectures and on anatomy in laboratory, stressing those aspects which have greatest relevance to the student's curriculum.
3 Class Hours, 2 Laboratory Hours

BIO 132 Human Biology II — 4 Credits
A continuation of BIO 131 Human Biology I covering the circulatory, respiratory, digestive, urinary, reproductive and endocrine systems. Emphasis on physiology in lectures and on anatomy in laboratory, stressing those aspects which have greatest relevance to the student's curriculum.
3 Class Hours, 2 Laboratory Hours
Prerequisite: BIO 131 Human Biology I

BIO 140 Pathophysiology — 3 Credits
Symptoms, syndrome and etiology of pathogenic processes affecting the function and structure of the body.
3 Class Hours
Prerequisite: BIO 132 Human Biology II

BIO 150 Microbiology — 4 Credits
The biology of the common bacteria and related microorganisms. General microbiology including asepsis disinfection, sterilization, cultivation, pathogenicity, resistance, identification.
3 Class Hours, 3 Laboratory Hours

BIO 151 Aquatic Biology — 4 Credits
A study of how light, temperatures and water chemistry influence the plants and animals which live in ponds, lakes, rivers, and estuaries. Current and future ecology. Local, regional and national water related problems including pollution, waste water treatment, ground water contamination, acid rain, water recycling, salt water encroachment, wetland destruction. Offered Spring Semester 1991.
3 Class Hours, 2 Laboratory Hours

BIO 160 Microbiology — 3 Credits
Position of microorganisms in the biological world, as well as their cultivation and identification. Asepsis, disinfection and sterilization. Disease transmission and the human elements in defense. For Dental Hygiene Students.
2 Class, 3 Laboratory Hours

BIO 170-199 Special Topics in Biology — 1-2 Credits
Special courses covering particular topics in the biological sciences beyond the scope of the normal course offerings.

BIO 171 Physiology of Exercise — 1 Credit
Designed to develop an understanding and appreciation for the role of consistent exercise in maintaining good health. The interrelationship of the muscular, cardiovascular, respiratory and digestive systems and the net effect of training on these systems.
1 Class Hour

BIO 200 Ecology: The Everglades — 4 Credits
A scientific yet sensitive look at one of the world's rare and endangered wilderness areas. Everglades ecology is studied through an extensive wilderness camping experience in Everglades National Park, involving a minimum of 90 hours of classroom and field instruction.
3 Class Hours, 3 Laboratory Hours
Prerequisite: College Biology

BIO 299 Independent Study — 1-3 Credits
An individual student project in a biological field which is beyond the scope of requirements of the courses offered by the department, conducted under the direction of faculty member and approved by the department chairperson. Independent Study is available to students who have a minimum of 3 semester hours of biology.

BUSINESS

BUS 100 Accounting I — 4 Credits
Introduction to accounting principles and procedures necessary to complete the accounting cycle. How computers are used in accounting systems. Emphasis on journals, ledgers and financial statements. Accounting for merchandising transactions, valuation of inventories, and payroll.
4 Class Hours

BUS 101 Accounting II — 4 Credits
Expansion of the fundamental concepts and procedures of accounting. How computers can be applied to accounting systems. Emphasis on internal control, voucher systems and cash transactions, receivables and payables. The acquisition, depreciation and disposal of plant assets. Accounting methods and procedures relating to partnerships and the corporate form of business organizations. Manufacturing with emphasis on the special problems and additional accounting procedures to measure, control and report factory production costs.
4 Class Hours
Prerequisite: BUS 100 Accounting I

BUS 102 Payroll Accounting — 2 Credits
A comprehensive study of Federal and State laws and regulations affecting payrolls and payroll taxes. Practical report preparation and reporting requirements. Proper accounting practices to record payroll taxes.
2 Class Hours

BUS 107 The Freshman Experience — 1 Credit
An introduction to college life for the beginning student in the Business Department. College and Departmental policies and procedures, academic advisement and registration, study skills, the library, transfer and employment opportunities, topics in health and fitness.
1 Class Hours

BUS 110 Introduction to Business — 3 Credits
General background of modern business practices through the study of organization and management, production, human resources, accounting and finance, marketing, and the information needed for control and management decisions in business and society.
3 Class Hours

BUS 112 Quantitative Business Methods **3 Credits**
Quantitative analysis of contemporary business problems. Emphasis is on bank records, percentages, markups, cash and trade discounts, overhead distribution, simple interest and negotiable instruments, depreciation, inventory estimation and valuation, credit, insurance, compound interest, and annuities.
3 Class Hours
Prerequisite: MAT 090 A Basic Mathematics Review or passing grade on Math Placement Test

BUS 115 Business Statistics **3 Credits**
Concepts and mechanics of measures of central tendency, measures of dispersion, probability, sampling theory, estimation, hypothesis testing, and correlation as they relate to general problems in business and economics.
3 Class Hours

***BUS 117 Business and Society** **3 Credits**
The role of business in the contemporary world. Increasingly difficult parameter for business despite the growing demands of accountability from government and of social responsibility from consumers. Business values and ethics, the role of business and government, environmental issues and energy policy, business and labor, business and consumer, the influence of multi-national corporations.
3 Class Hours

BUS 118 Business Law I **3 Credits**
Law as an evolutionary and democratic process. Court structure, administrative law, law-of-contracts, legal principles of agency, employment rights and an introduction to partnership.
3 Class Hours

BUS 120 Business Law II **3 Credits**
The law governing the negotiation or transfer of commercial paper, law of sales, law of personal and real property, bailments, insurance, landlord-tenant relationships and an introduction to corporate law.
3 Class Hours
Prerequisite: BUS 118 Business Law I

BUS 129 Consumer Behavior **3 Credits**
Emphasizes the development of how people make purchase decisions in the market place. Consumer decision-making, learning, brand loyalty and market segmentation.
3 Class Hours

BUS 130 Retail Management **3 Credits**
Techniques involved in planning, organization, control and operation of diverse retail establishments. Trading area analysis, warehousing, inventory control, customer relations. Case Studies, field trips.
3 Class Hours
Prerequisite: BUS 264 Retailing

BUS 131 Personal Finance **3 Credits**
Guidelines for financial planning regarding long term and short term installments buying i.e. homes, autos, etc., credit, insurances, taxes, savings, budgeting, and investments in real estate, stocks, bonds, IRA's, mutual funds, money market accounts, etc.
3 Class Hours

***BUS 135 Investments** **3 Credits**
Evaluation of retirement/pension choices (IRA, SEP/IRA, Keogh, 403b, 401k, etc.) Selection, analysis and valuation of Limited Partnerships, Investment Companies (Closed-End vs. Open-End [Mutual Funds]), REIT's, Unit Investment Trusts, Fixed Income Securities, Government Securities, Common Stock, Options, Annuities and various insurance company hybrids. Non-Financial Assets, i.e. collectibles and Precious Metals as tools of investing.
3 Class Hours

BUS 141 Marketing **3 Credits**
Introductory study of Marketing as an art and a science. Analysis of the basic principles and practices necessary to complete the marketing cycle effectively. Marketing of goods and services, from conception of the original product idea to delivery to the ultimate consumer. Marketing mix, marketing concept, environmental and societal constraints. Lecture, discussion, cases.
3 Class Hours

BUS 152 Selling Fundamentals **3 Credits**
Principles of sales with practical application. Steps leading to a successful sale - prospecting, planning and delivering, dramatizing, handling objections, closing, building good will. Development and presentation of a complete procedure for a product or service. Closed-circuit television used to critique sales presentations.
3 Class Hours

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

***BUS 154 Purchasing** **3 Credits**
Analytical approach to techniques employed in the industrial purchasing phase of marketing. Emphasis on the organization of the purchasing functions as an operational unit of the firm directed toward procurement activities.
3 Class Hours

***BUS 159 Management Institute I** **1 Credit**
From the "hands on" point of view, an overview of what it takes to be a manager. Self evaluation, management functions, data management, legal regulations and unions, organizational overview, the people factor in management, and role playing. A team-teaching approach is used when possible.
1 Class Hour

BUS 161 Real Estate Appraisal **3 Credits**
Designed to acquaint participants with the appraisal process of real property. Market approach, income approach and cost approach to value. Activities designed to build appraisal skills through case study, prepare appraisal reports and analyses.
3 Class Hours

***BUS 163 Real Estate for Salespersons** **4 Credits**
Designed to meet New York State requirements for licensure as a real estate salesperson. Land use regulation, law of contracts, real estate instruments, real estate mathematics, real estate finance, closing and closing costs, brokerage and the law of agency, valuation and listing procedures, license law and ethics, human rights and fair housing
4 Class Hours

***BUS 164 Real Estate for Brokers** **4 Credits**
Designed to meet New York State requirements for licensure as a real estate broker. Land use regulation, operation of a real estate broker's office, general business law construction, subdivision and development, leases and agreements, liens and easements, taxes and assessments, investment property, property management, condominiums and cooperatives, appraisal, advertising, rent regulations.
4 Class Hours
Prerequisite: BUS 163 Real Estate for Salespersons

***BUS 170 Insurance for Agents and Brokers** **7 Credits**
Comprehensive survey of insurance. Fire, marine, automobile, owner liability, burglary, boiler, machinery, accident and health, fidelity and surety insurance. Insurance law and duties of the agent. Designed to meet requirements for the property and casualty license.
7 Class Hours

***BUS 176 Real Estate Finance** **3 Credits**
Analysis of theories, practices and policies of real estate financing. Mortgage theory and lending practices in addition to alternative means of financing real property in the contemporary market. Case practices to build analytical skills in selecting different financing approaches.
3 Class Hours

***BUS 188 Income Tax I** **2 Credits**
Fundamental Federal and New York State income tax rules and regulations for filing personal income tax forms. Gross income inclusions and exclusions, adjustments to income, tax credits, estimated taxes, itemized deductions, penalties and avoidance, amended tax returns.
2 Class Hours

***BUS 189 Income Tax II** **2 Credits**
Preparation of supplementary tax forms, such as capital gains, rentals, income averaging, sole proprietorship, self employment taxes, investment credit, corporation tax returns, sub-chapter S corporations, gift and inheritance taxes.
2 Class Hours

BUS 200 Intermediate Accounting I **4 Credits**
An intensive study of accounting theory and procedures. Emphasis on balance sheet accounts and their interrelationships with income statement accounts. The accounting process and correction of errors. Advanced treatment of cash, receivables, inventories.
4 Class Hours
Prerequisite: BUS 101 Accounting II

BUS 201 Intermediate Accounting II **4 Credits**
A more advanced treatment of accounting for fixed assets, intangible assets, current and long-term liabilities. Corporation accounting, funds flow reporting, financial statement analysis.
4 Class Hours
Prerequisite: BUS 200 Intermediate Accounting I

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

BUS 205 Cost Accounting I — 4 Credits
Nature and purpose of cost accounting. Job order and process costing. Accounting for factory overhead and analysis of variances. Accounting for labor and material.
4 Class Hours
Prerequisite: BUS 101 Accounting II

BUS 206 Cost Accounting II — 4 Credits
Further consideration of cost accounting principles, standard costs and variances. The construction of budgets, profit planning. Flexible budgets. Direct costing. Break even analysis. Accounting for by-products and joint products. Non-Manufacturing costs.
4 Class Hours
Prerequisite: BUS 205 Cost Accounting I

BUS 210 Managerial Accounting — 4 Credits
Accounting for managerial analysis and decision making, providing an analysis of accounting data useful in the planning and control functions of a firm. Study of cost concepts, break-even, differential accounting and responsibility accounting.
4 Class Hours
Prerequisite: BUS 101 Accounting II

BUS 224 Business Finance — 3 Credits
Financial principles and procedures of capital management. Analysis of the relationship of finance to micro and macro economic factors such as inflation business cycles, competition, regulation. Emphasis on corporate goals and objectives as a determining factor in the choice of financial management policy. Application of financial ratios, cash budgeting, forecasting, leverage, working capital policy, capital markets, stocks and bonds, valuation, and other basic areas of finance.
3 Class Hours
Prerequisite: BUS 100 Accounting I

BUS 229 Advertising — 4 Credits
Development, economies, functions of advertising. Cost application, media, testing and research methods. Development of advertisements, copy and layout, methods and problems of reproduction. Planning the advertising campaign with step by step developments. Lectures, discussions, demonstrations. BUS 141 Marketing is recommended as preparation for this course.
4 Class Hours

BUS 238 Marketing Research — 3 Credits
Methods of collecting and interpreting marketing information which affect marketing management. Specific applications to problem identification in market development, gauging market potential and implementation of research designs in the market place.
3 Class Hours

BUS 242 Marketing Seminar — 3 Credits
Senior capstone course which integrates various business subjects previously studied. Individual and team approach to analysis of comprehensive marketing and management cases and cooperative consideration of alternative decisions to problem solving.
3 Class Hours
Prerequisite: Non-Marketing majors must have adviser's permission

BUS 245 Management: A Behavioral Approach — 3 Credits
A comprehensive analysis of managerial theories and an integration of selected social sciences to investigate organizational problems related to managerial functions. Impact of the organizational environment and work groups upon human behavior.
3 Class Hours

BUS 246 Principles of Management — 3 Credits
Principles of managerial practices. Planning, organizing, directing, and controlling. Exposes students to proper methods and techniques to achieve employee and job satisfaction. Topics covered include scientific management, behavioral theory, and introduction to management science.
3 Class Hours

BUS 249 Personnel Management — 3 Credits
Principles of managerial practices. The four functions of management: planning, organizing, directing and controlling. Designed to expose the student to the proper methods and techniques to achieve employee and job satisfaction. Processing, developing, maintaining proper utilizing of the labor force. A review of the history and impact of organized labor incorporating economic, political and social pressures which influence employment. Effective interview poise, personal appearance, interviewing techniques, job opportunities and placement services. Correct preparation of a resume and the utilization of references.
3 Class Hours

*BUS 252 Supervision of Personnel — 2 Credits
Concepts and psychology of personnel supervision. Emphasis on the application of management theory through use of case studies and classroom discussions.
2 Class Hours

*BUS 254 Management Institute II — 3 Credits
From the "hands on" point of view, an in-depth study of what it takes to be a manager. Coaching, counseling, performance appraisal, interviewing, conflict resolution, risk, communications, data management, and dealing with stress. A team-teaching approach is used when possible.
3 Class Hours

*BUS 255 Industrial Labor Relations — 2 Credits
Processes of bargaining and contract administration between industrial employers and unions representing employees, as s system of compromising opposing objectives and settling differences. Origins of unions, how they organize and gain recognition and how the labor agreement is negotiated and administered. Interaction among employees, stewards and supervisors. Labor laws. Institutions such as the National Labor Relations Board, mediation, services, arbitration boards and courts.
2 Class Hours

*BUS 258 Human Relations in Business — 2 Credits
Basic psychological principles applied to the problems of employee selection, training, evaluation, merit rating and advancement. Social interaction and human relations in industry. Motivation concepts and techniques, job satisfaction, morale, conference leadership and employee and management development.
2 Class Hours

BUS 259 Business Report Writing — 3 Credits
Training in logical analysis of business case problems, applied to the preparation of accurate written reports. Methods and skills in formal and informal business writing. Preparation of tables, charts, reference citations, and bibliographies. Improvement of basic business writing skill involved in interoffice memos, letters of adjustment, bids, quotations, public relations.
3 Class Hours

BUS 262 Small Business Management — 3 Credits
An overview designed for those interested in small business as owner-managers. Development of modern management techniques covering forms of organization, site acquisition and location, insurance, marketing, financing, pricing, breakeven, permits, licenses and franchising.
3 Class Hours

BUS 263 Small Business Seminar — 4 Credits
An intensive study of the various facets involved in organizing and operating a small business venture. Researching and evaluating business opportunities, establishing a buying/selling price for the business, small business taxation, analyzing and solving business problems, using information to manage marketing ideas. Heavy emphasis on development of the business plan and preparation of the loan proposal.
4 Class Hours
Prerequisite: BUS 101 Accounting II

BUS 264 Retailing — 3 Credits
The history and overview of Retailing as well as the types of retail establishments. The four major areas of retailing: Merchandising, Finance, Operations, and Sales Promotion will be covered in depth. Types of retail outlets, including specialty, department stores, chain stores, supermarkets and discount stores, etc., will be considered.
3 Class Hours

BUS 265 Retail Merchandising — 3 Credits
Principles of effective display: interior, window, point-of-purchase. Analysis of consumer buying habits, market evaluation, trend forecasting. Evaluation of variables of decor, lighting, impulse arrangements. Techniques of advertising and sales promotion. Case studies, field trips.
3 Class Hours
Prerequisite: BUS 264 Retailing

BUS 266 Advertising and Promotion for Small Business — 4 Credits
A comprehensive study emphasizing "hands on" approach to small business advertising and promotion. Functions of advertising and promotion, budgeting, media selection, cost consideration, development of copy and layout. Students will use various media, including television, in the preparation of an advertising campaign. Current information on publicly, public relation, merchandising. Store layout and design, sales promotion, dealer programs, and co-op advertising.
4 Class Hours

***TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS**

BUS 270 Management Science — 3 Credits
An introduction to managerial problems relating to the planning and controlling functions, which provide guidelines to making rational decisions. A realistic approach utilizing cases and simulation is taken to expose the student to quantitative as well as subjective analysis to point out the constraints placed upon management.
3 Class Hours
Prerequisite: BUS 115 Business Statistics or MAT 124 Statistics

BUS 295 Accounting Seminar — 4 Credits
In-depth treatment of accounting for payroll taxes followed by actual completion of required state and federal tax forms. Thorough coverage of the Individual Tax Form 1040, schedules A, B, C, D, E, and G, small business taxes schedule SE and investment credit. Corporate Tax form 1120. Accounting concepts and current trends in accounting as reflected through financial statement analysis.
4 Class Hours

BUS 297 Cooperative Work Experience — 1-3 Credits
Cooperative education is available to students in the marketing management, marketing sales and accounting curriculums. On-the-job experience may be obtained in such areas as retailing, banking, fast foods, government services and hotel management, as well as in CPA firms, public accounting offices, industrial, business and government offices where accounting is performed. Cooperative work students will meet with the coordinator one hour each week.
Prerequisite: Full-time student (minimum of 12 credit hours) maintaining an overall grade-point average of 2.5, with 3.00 in Business courses and no F's

BUS 299 Independent Study — 1-4 Credits
The student, under the guidance of a faculty member, undertakes an investigation, study and research in an advanced concept or problem concerning his/her major field of study. Only one independent study course is allowed per semester.
Prerequisite: Approval of Faculty Member and Department Chairperson

CHEMISTRY AND CHEMICAL ENGINEERING TECHNOLOGY

CHM 102 Preparatory Chemistry — 4 Credits
Introductory course in chemistry emphasizing problem-solving techniques related to chemical concepts. Atomic structure, stoichiometry, metric units, chemical bonding, chemical nomenclature, solution chemistry.
4 Class Hours
Prerequisite: MAT 104 Basic Technical Math or equivalent

CHM 120 Fundamental Chemistry — 4 Credits
First course for Fire Protection Technology, Health Sciences and Criminal Justice students. Composition of substances, atomic structure, periodicity, bonding, chemical equations, states of matter, aqueous solutions, chemical equilibria and introduction to organic chemistry.
3 Class Hours, 3 Laboratory Hours

CHM 121 Forensic Sciences — 4 Credits
Introduction to forensic chemistry for Criminal Justice students. Examination of firearms, cartridges, explosives, drugs and other types of physical evidence. Emphasis on proper handling of substances found in crime scene investigations. Laboratory techniques include many modern instrumental methods, such as gas chromatography, infrared and mass spectroscopy.
3 Class Hours, 3 Laboratory Hours

*CHM 125 Chemistry — 3 Credits
Fundamental concepts of inorganic chemistry. Composition of substances, kinetic and molecular theories, atomic structure and bonding, solutions and colloids, ions in solution and introduction to organic chemistry. For Fire Protection Technology students.
2 Class Hours, 3 Laboratory Hours

CHM 133 Survey of Organic Chemistry — 3 Credits
Fundamental treatment of organic chemistry, Nomenclature, properties of selected functional groups, mechanisms, stereochemistry and synthetic methods. Special emphasis on biomolecules such as lipids, carbohydrates, nucleic acids, vitamins and medicinally active compounds.
3 Class Hours
Prerequisite: CHM 145 Chemistry I and CHM 145 Chemistry Laboratory I
Corequisite: CHM 146 Chemistry II and CHM 146 Chemistry Laboratory II and CHM 133L Survey of Organic Chemistry Laboratory

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

CHM 133L Survey of Organic Chemistry Laboratory — 1 Credit
Emphasis on techniques of separation, identification and purification by classical and instrumental methods such as gas chromatography and spectroscopy, and selected experiments with biomolecules.
4 Laboratory Hours
Prerequisite: CHM 145 Chemistry Laboratory
Corequisite: CHM 133 Survey of Organic Chemistry

CHM 141 General Organic and Biochemistry I — 3 Credits
Introductory treatment of general chemistry for the non-science student emphasizing applications of chemistry in everyday life. Measurements, atoms and bonding, the states of matter, nuclear processes, oxidation and reduction solutions, acids and bases. Applications include energy sources, effects of radiation, the environment, life processes, testing of advertising claims. For Liberal Arts non-science students.
3 Class Hours
Corequisite: CHM 141L General Chemistry Laboratory I

CHM 141L General Chemistry Laboratory I — 1 Credit
Experiments to introduce chemical laboratory techniques while increasing awareness of the chemical world and to attain some insight into how a chemist attacks a problem. Qualitative and quantitative measurements.
3 Laboratory Hours
Corequisite: CHM 141 General Organic and Biochemistry I

CHM 142 General Organic and Biochemistry II — 3 Credits
Continuation of CHM 141 General Chemistry. Basic concepts of organic and biochemistry. Petroleum, halogenated hydrocarbons, plastics, drugs, consumer products, living systems, food and metabolism. For Liberal Arts non-science students.
3 Class Hours
Prerequisite: CHM 141 General Organic and Biochemistry I
Corequisite: CHM 142L General Chemistry Laboratory

CHM 142L General Chemistry Laboratory II — 1 Credit
A continuation of CHM 141L General Chemistry Laboratory emphasizing organic and biochemical experiments which substantiate classroom lectures.
3 Laboratory Hours
Corequisite: CHM 142 General Organic and Biochemistry II

CHM 145 Chemistry — 3 Credits
Comprehensive treatment of general chemistry for the science oriented student. Builds on their prior chemistry, with emphasis on the basic laws and theories of chemistry and their derivation from experimental evidence. Presents the qualitative and quantitative aspects of matter's composition and changes and their unifying principles. Includes physical and chemical properties, periodicity of elements, stoichiometry, current atomic and bonding theories, laws and theories of physical states and changes of state, solution chemistry.
3 Class Hours
Prerequisite: Regents Chemistry (75 minimum final grade) or CHM 102 Preparatory Chemistry and Regents Level II Math or equivalent
Corequisite: CHM 145L Chemistry Laboratory

CHM 145L Chemistry laboratory — 1 Credit
Laboratory experiments to emphasize the empirical basis for the principles discussed in lecture and the proper gathering and interpretation of experimental data.
3 Laboratory Hours
Corequisite: CHM 145 Chemistry

CHM 146 Chemistry — 3 Credits
Continuation of CHM 145 Chemistry including thermochemistry, kinetics, equilibrium, equilibrium in aqueous solution, coordinating chemistry and electrochemistry.
3 Class Hours
Prerequisite: CHM 145 Chemistry
Corequisite: CHM 146L Chemistry Laboratory

CHM 146L Chemistry Laboratory — 1 Credit
Continuation of CHM 145L Chemistry Laboratory with emphasis on PH, spectrophotometric and potentiometric instruments and techniques and qualitative analysis.
3 Laboratory Hours
Prerequisite: CHM 145L Chemistry Laboratory
Corequisite: CHM 146 Chemistry

CHM 161 Chemistry — 3 Credits
Basic concepts underlying chemical action emphasizing measurement, basic chemical calculations, atomic structure and the periodic law. Chemical bonding, states of matter, solutions, kinetic/molecular theories, chemical equilibrium and energy changes in chemical reactions.
3 Class Hours
Prerequisite: Regents Chemistry or CHM 102 Preparatory Chemistry
Corequisite: CHM 161L Chemistry Laboratory

CHM 161L Chemistry Laboratory — 1 Credit

Experiments illustrating concepts from lecture. Emphasis on keeping a laboratory notebook and on laboratory skills required for the chemical laboratory. Exercises mostly quantitative in nature.
3 Laboratory Hours, 1 Recitation Hour
Corequisite: CHM 161 Chemistry

CHM 162 Chemistry — 3 Credits

A continuation of CHM 161 Chemistry. Oxidation-reduction and electrochemistry, acids, bases and salts. Solubility product principle, acid/base equilibrium, thermodynamcis. Principles of qualitative analysis.
3 Class Hours
Prerequisite: CHM 161 Chemistry and CHM 161L Chemistry Laboratory
Corequisite: CHM 162L Chemistry

CHM 162L Chemistry Laboratory — 1 Credit

Experiments illustrating concepts from lecture, including seven weeks of semi-mirco qualitative analysis. Emphasis on laboratory skills and notebookkeeping.
3 Laboratory Hours, 1 Recitation Hour
Prerequisite: CHM 161 Chemistry and CHM 161L Chemistry Laboratory
Corequisite: CHM 162 Chemistry

CHM 220 Introduction to Instrumental Analysis — 2 Credits

An introduction to the theory and laboratory instruction in electrochemical, nuclear, optical and chromatographic methods of analytical chemistry. Laboratory techniques include potentiometry, conductimetry, coulometry, polarography, liquid scintillation counting, gamma spectrometry, ultraviolet-visible, infrared, atomic absorption spectrophotometry, gas, ion, high performance liquid chromatography, and gas chromatography, mass spectrometry. For Medical Laboratory Technology students.
1 Class Hour, 3 Laboratory Hours
Prerequisite: CHM 146 Chemistry

CHM 245 Organic Chemistry — 3 Credits

A fundamental treatment of organic chemistry. Organic nomenclature, chemical properties of selected functional groups, mechanisms, stereochemistry and synthetic methods. For Liberal Arts science majors and Engineering Science students with departmental approval.
3 Class Hours
Prerequisite: CHM 146 Chemistry
Corequisite: CHM 245L Organic Chemistry Laboratory

CHM 245L Organic Chemistry Laboratory — 2 Credits

Basic techniques of separation and purification such as recrystallization, distillation, extraction, chromatography, modern instrumental techniques. Introduction to modern organic synthesis.
4 Laboratory Hours
Corequisite: CHM 245 Organic Chemistry

CHM 246 Organic Chemistry — 3 Credits

A continuation of CHM 245 Organic Chemistry including spectroscopy and introduction to molecules of biological importance.
3 Class Hours
Prerequisite: CHM 245 Organic Chemistry
Corequisite: CHM 246L Organic Chemistry

CHM 246L Organic Chemistry Laboratory — 2 Credits

A continuation of CHM 245L Organic Chemistry Laboratory including an introduction to complex multi-step synthesis and qualitative organic analysis by classical and modern instrumental techniques.
4 Laboratory Hours
Prerequisite: CHM 245 Organic Chemistry and CHM 245L Organic Chemistry Laboratory
Corequisite: CHM 246 Organic Chemistry

CHM 251 Chemical Engineering Technology Seminar — ½ Credit

Topics in the field of Chemical Engineering Technology will be presented by guest lecturers from industry and academics. For Chemical Engineering Technology students.
1 Class Hour

CHM 261 Organic Chemistry — 3 Credits

A systematic study of the families of organic chemistry, including concepts of bonding, equilibria, reaction, kinetics, energy profiles, isomerism and synthesis. Families viewed with emphasis on nomenclature, structural features, preparations, reaction products and uses.
3 Class Hours
Prerequisite: CHM 162 Chemistry
Corequisite: CHM 261L Organic Chemistry Laboratory

CHM 261L Organic Chemistry Laboratory — 2 Credits

Experiments include separation techniques using instrumentation (infra-red spectroscopy, gas chromatography) and synthesis.
6 Laboratory Hours
Corequisite: CHM 261 Organic Chemistry

CHM 262 Organic Chemistry — 3 Credits

Continuation of CHM 261 Organic Chemistry. Mass spectroscopy and nuclear magnetic resonance. Special topics including heterocyclic compounds, polymers, biomolecules.
3 Class Hours
Prerequisite: CHM 261 Organic Chemistry
Corequisite: CHM 262L Organic Chemistry Laboratory

CHM 262L Organic Chemistry Laboratory — 2 Credits

Emphasis on qualitative organic chemistry. Identification of unknowns.
6 Laboratory Hours
Prerequisite: CHM 261L Organic Chemistry Laboratory
Corequisite: CHM 262 Organic Chemistry

CHM 265 Instrumental Methods of Chemical Analysis — 3 Credits

Principles and techniques of modern quantitative analysis including treatment of analytical data, sampling, solution adjustment, chelatometry, redoximetry, aqueous and non-aqueous acid-base titrations, electrophoresis and isoelectric focusing, ion-exchange, ion chromatography, conductimetry, coulometry electrogravimetry, polarography, amperometry, potentiometry, radioisotope methodology. For Chemical Engineering Technology and Liberal Arts "chemical model" students.
3 Class Hours
Prerequisite: 1 full year of college general chemistry and MAT 162 Applied Calculus and PHY 142 Physics
Corequisite: CHM 265L Instrumental Methods of Chemical Analysis Laboratory

CHM 265L Instrumental Methods of Chemical Analysis Laboratory — 2 Credits

Application of chelometric, redox, precipitimetric, aqueous and non-aqueous acid-base methods for chemical analysis or organic and inorganic compounds. Operation of polarographs, conductimeters, potentiometers, coulometers, and electroanalyzers for applications in electrochemical methods of analysis. Operation of a microprocessor controlled liquid scintillation counter, gamma spectrometer, and Geiger-Muller counter for applications in radioisotope methodology. Statistical evaluation of data obtained by the various analytical methods. For Chemical Engineering Technology and Liberal Arts "chemical model" students.
6 Laboratory Hours
Prerequisite: 1 full year of college general chemistry and MAT 162 Applied Calculus I and PHY 142 Physics
Corequisite: CHM 265 Instrumental Methods of Chemical Analysis

CHM 266 Instrumental Methods of Chemical Analysis — 3 Credits

Principles and techniques of modern instrumental methods of chemical analysis, including ultraviolet, visible, infrared, nuclear magnetic resonance, atomic absorption, emission and mass spectroscopy. Ion, gas and liquid chromatography. Chemical and scanning electron microscopy and differential thermal analysis. For Chemical Engineering Technology students.
3 Class Hours
Prerequisite: CHM 265 Instrumental Methods of Chemical Analysis
Corequisite: CHM 266L Instrumental Methods of Chemical Analysis Laboratory

CHM 266L Instrumental Methods of Chemical Analysis Laboratory — 2 Credits

Analysis by optical, separations, thermal techniques, trace methods applied to contemporary, industrial and environmental problems.
6 Laboratory Hours
Prerequisite: CHM 265 Instrumental Methods of Chemical Analysis
Corequisite: CHM 266 Instrumental Methods of Chemical Analysis

CHM 271 Chemical Processes — 3 Credits

Material and energy balances along with applied and physical principles as they apply to chemical engineering. Emphasis on chemical problem solving.
3 Class Hours
Prerequisite: CHM 162 Chemistry, MAT 162 Applied Calculus I and PHY 142 Physics
Corequisite: CHM 271L Chemical Processes Laboratory

CHM 271L Chemical Processes Laboratory — 2 Credits

Application of lecture topics to industrial situations. Emphasis on written and oral reports.
4 Laboratory Hours
Corequisite: CHM 271 Chemical Processes

CHM 272 Chemical Processes — 3 Credits

Staged operations dealing with phase equilibrium. Graphical, analytical and computer methods are used to solve unit operations problems.
3 Class Hours
Prerequisite: CHM 271 Chemical Processes
Corequisite: CHM 272L Chemical Processes

CHM 272L Chemical Processes Laboratory 3 Credits
Measurement of phase equilibrium. Graphical, analytical and computer methods are used to solve unit operations problems.
4 Laboratory Hours
Corequisite: CHM 272 Chemical Processes

CHM 290 Forensic Toxicology 3 Credits
Application of the principles of forensic toxicology and the related forensic sciences within the scope of medical-legal investigation. Drug and poison analysis, examination of physical evidence and death investigation. Laboratory sessions will provide basic knowledge of forensic analysis utilizing microscopy, gas chromatography, thin layer chromatography and spectroscopy.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CHM 120 Fundamental Chemistry or a semester of General Chemistry or permission of instructor

***CHM 291 Organic Chemistry I** 3 Credits
***CHM 292 Organic Chemistry II** 3 Credits
Nomenclature, properties of selected functional groups, mechanisms, stereochemistry, synthetic methods and spectroscopy. The laboratory stresses basic techniques of reactions, separations and isolations by classical methods as well as modern instrumental techniques.
2 Class Hours, 3 Laboratory Hours each
Prerequisites: CHM 146 Chemistry for CHM 291
CHM 291 Organic Chemistry I for CHM 292

***CHM 293 Analytical-Instrumental Chemistry I** 3 Credits
Classical analytical chemistry - sampling, statistics, gravimetric and volumetric analysis. Introduction to electrochemistry.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CHM 146 Chewmistry

***CHM 294 Analytical-Instrumental Chemistry II** 3 Credits
Continuation of CHM 293 Analytic-Instrumental Chemistry I. Additional electrochemistry and electrochemical techniques. Emphasis on spectroscopic and chromatographic methods. Visible, infrared and nuclear magnetic resonance spectroscopy. Gas, liquid, column and thin layer chromatography.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CHM 293 Analytical-Instrumental Chemistry I

CHM 299 Independent Study 1-4 Credits
The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a work assignment.
Prerequisite: Departmental approval

CIVIL ENGINEERING TECHNOLOGY

CIV 110 Introduction to Civil Engineering Technology ½ Credit
Introduction to the College and its policies, placement, transfer and study skills. Reasonable skill in the hand-held calculator to be developed. Outside speakers representing the various sectors of employment.
1 Class Hour

CIV 111 Surveying I 4 Credits
Fundamentals of plane surveying. Angle and distance measurement, leveling, stadia, note keeping, operation and care of instruments, traversing and topographic surveys. Use of EDM Instruments. Extensive laboratory application of theory.
2 Class Hours, 6 Laboratory Hours
Prerequisite: MAT 140 or equivalent
Corequisite: MAT 161 Precalculus

CIV 112 Surveying II 2 Credits
A continuation of CIV 111 Surveying I. Error probability, topographic surveying and mapping, boundary surveys and deed searching, field astronomy, planetable, control surveys, state plane coordinates, use of EDM instruments. Select topics in Photogrammetry.
1 Class Hour, 3 Laboratory Hours
Prerequisite: CIV 111 Surveying I

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

CIV 115 Engineering Drawing 2 Credits
Fundamentals of Engineering Drawing includes care and use of instruments line-work, lettering geometric constructions, orthographic projection, sections auxiliary views, pictorial drawings, and dimensioning. Fundamentals of Descriptive Geometry including visibility, true length, true shape, parallelism perpendicularity, intersections, and developments
1 Class Hour, 3 Laboratory Hours

CIV 119 Architectural Drafting 2 Credits
Fundamentals of architectural drafting including floor plans, elevations sections, details, schedules, plot plans, plumbing layouts, electrical layouts Introduction to solar design. Emphasis on residential drawings
4 Laboratory Hours
Prerequisite: CIV 115 Engineering Drawing

CIV 124 Mechanics (Statics) 3 Credits
Static force systems and equilibrium. Free body diagrams, trusses, graphic statics, spatial force systems, friction, centroids, moments of inertia
3 Class Hours
Prerequisite: PHY 141 Physics

CIV 155 Surveying 3 Credits
Plane surveying including distance measurement, note keeping, compass surveying, leveling, angle measurement, care and use of instruments, stadia traversing, coordinates, area computation, mapping and records
2 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 139 Algebra and MAT 140 Trigonometry or equivalent

***CIV 156 Route Surveying** 4 Credits
Horizontal and vertical curves, spirals, sight distances and earthwork. Introduction to computer applications. Laboratory includes problem sessions using the college's computer to solve coordinate geometry problems
3 Class Hours, 2 Laboratory Hours
Prerequisite: CIV 155 Surveying

***CIV 159 Architectural Drafting I** 3 Credits
Development of working drawing for use in residential type construction. Plot plans, floor plan, elevations, details, mechanical and electrical layouts. Lectures to include construction materials, specifications and methods
2 Class Hours, 3 Laboratory Hours

***CIV 160 Architectural Drafting II** 3 Credits
A continuation of CIV 159 Architectural Drafting I. Development of working drawings for two-story and split-level residences
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 159 Architectural Drafting I

***CIV 161 Architectural Drafting III** 3 Credits
Development of a set of working drawings for a small two-story commercial building including floor plans, elevations, sections, details, mechanical and electrical layouts, window and door schedules. Term project
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 160 Architectural Drafting II

CIV 215 Strength of Materials 4 Credits
Concepts of stress and strain. Behavior of materials due to axial force, torsion and moment. Stresses in beams and columns, shear and moment, deflections, determinate and indeterminate members, composite members, combined stresses.
4 Class Hours
Prerequisite: CIV 124 Mechanics (Statics)

CIV 216 Route Surveying 3 Credits
Route surveying: Simple and compound curves, vertical curves, spirals and earthwork. Selected topics in route design, and curve problems in highway design. Computer applications (COGO
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 111 Surveying I

CIV 217 Materials Testing 3 Credits
Composition, properties and testing of construction materials. Major emphasis on plain concrete. Aggregates, cements, admixtures, design and proportioning of concrete mixes, curing and inspection. Bituminous materials and ferrous metals, load and deformation measurements, behavior of materials under load, strain gages. Writing Emphasis Course
2 Class Hours, 3 Laboratory Hours
Corequisite: CIV 215 Strength of Materials

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

CIV 224 Reinforced Concrete Design **3 Credits**
Fundamental theory and principles for design of reinforced concrete by the strength method. Design, analysis and detailing to rectangular beams. T-beams, beams reinforced for compression, columns and footings. Theory of prestressed concrete. An integrated design and detailing project.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 215 Strength of Materials

CIV 226 Structural Steel Design **3 Credits**
Fundamental theory and principles necessary for design of simple steel structures. Design, investigation and detailing of beams, columns, tension and compression members and their connections. Composite beams. An integrated design and detailing project.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 215 Strength of Materials

***CIV 228 Estimating and Construction Planning** **3 Credits**
A systematic approach to estimating building project costs combined with a study of construction scheduling techniques. Use of spreadsheet as an estimating tool. Term project in estimating.
2 Class Hours, 2 Laboratory Hours

CIV 231 Estimating and Construction Planning **3 Credits**
A systematic approach to estimating building project costs. Term project building cost estimate. Use of spreadsheet as an estimating tool.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 119 Architectural Drafting

CIV 236 Construction Management **3 Credits**
Principles of construction management, specification writing, with emphasis on planning, building, scheduling and controlling a project. Use of critical path program.
3 Class Hours

CIV 237 Hydraulics **3 Credits**
Hydraulics including properties of fluids, hydrostatics, fluid motion in or through orifices, nozzles, pipes, weirs, open channels, pipe branches and networks.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 124 Mechanics (Statics)

CIV 238 Architectural Design and Building Materials **3 Credits**
Design and detailing of commercial building including site considerations, space requirements, layout planning, building materials, construction methods, construction details, working drawings. Emphasis on individual creativity. Semester project.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 119 Architectural Drafting

CIV 240 Soil Mechanics **3 Credits**
Soil origin and nature, soil density, test borings, gradation, compaction, soil water, frost in soil, classification, permeability, shear strength, stress distribution, bearing capacity, piles. The laboratory covers ASTM and AASHO specifications used in classifying and predicting behavior of soils.
2 Class Hours, 3 Laboratory Hours
Prerequisite: CIV 215 Strength of Materials

CIV 255 Reinforced Concrete Design **3 Credits**
Fundamental behavior of reinforced concrete. Design and analysis of rectangular beams, T-beams, beams reinforced for compression, columns and footings. Major emphasis on ultimate strength design methods
3 Class Hours
Prerequisite: MET 235 or CIV 215 Strength of Materials

CIV 266 Hydraulics **3 Credits**
A basic course in theory and practical applications of hydraulics. Properties of fluids, measurements, hydrostatics, dynamic problems of both pipe and open channel flow. Application and limitations of some of the design aids in common use.
3 Class Hours
Prerequisite: MET 132 Applied Mechanics or equivalent

***CIV 268 Engineering Economics** **2 Credits**
Use of compound interest in financing and in determining engineering cost comparisons. Introduction to depreciation methods. Illustrative cases and problems (personal and engineering) including New York State Professional Engineering Examination problems.
2 Class Hours
Prerequisite: MAT 139 Algebra or equivalent

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

CIV 299 Independent Study **1-4 Credits**
The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent course allowed per semester. Consideration may be given to a project involving a work assignment.
Prerequisite: Departmental approval

COMMUNICATIONS

COM 100 Introduction to Mass Media **3 Credits**
Overview of the components of American mass media including history, structure, economics, regulation, verbal and visual imagery, and dynamics. Radio, television, newspapers, magazines, film, and the closely related advertising and public relations field are surveyed.
3 Class Hours

COM 110 Introduction to Photography **3 Credits**
Basics of camera design and operation, plus the fundamentals of photographic visualization and composition: line, form, color light, shadow. Darkroom procedures, film processing, basic printmaking, selective printing techniques. (Students must have their own 35mm single lens reflex camera and should expect to pay for their own photographic materials - about $60.)
2 Class Hours, 2 Laboratory Hours

COM 112 Intermediate Photography **3 Credits**
Systems of precise exposure and processing control. Creative darkroom techniques including selective toning, hand coloring, and high contrast variation. Portfolio development. Introduction to color; color processes and printing from color slides. (Students must have their own 35mm single lens reflex cameras, and should expect to pay for their own photographic materials - about $60.)
2 Class Hours, 2 Laboratory Hours
Prerequisite: COM 110 or permission of instructor

COM 115 Writing for the Media **3 Credits**
An introductory study of the elements necessary for media writing. Students will be exposed to writing formats commonly used in media production. Writing formats covered may include news reporting. TV/radio advertising, drama, documentaries and sports. Students will have the opportunity to utilize their writing skills in many of the aforementioned areas.
3 Class Hours

COM/THR 121 Makeup for TV and Film **1 Credit**
Use of prosthetics and cosmetics. Techniques of executing age, character and stylistic effects. Students to provide pertinent materials.
2 Studio Hours

COM 125 Introduction to Audio Theory and Production **3 Credits**
Introduction to the basic aspects of technical and production techniques of audio systems, including microphone, speaker, amplifier, recording and playback theory, placement and operations. Special emphasis will be given to the use of audio equipment including taping, editing, and duplicating.
3 Class Hours

COM 135 Selection, Evaluation and Utilization of Media **3 Credits**
Introductory course to help the student choose the most practical mode of media for communicating an idea or objective. Hardware and software will be demonstrated, discussed and made available for "hands on" utilization by students. Evaluation of audio-visual/LRC media to guide the student in effective utilization of instructional media materials and equipment. Students will prepare some media materials for the course.
3 Class Hours

COM/THR 140 Presentation for Radio/TV **3 Credits**
Presentation as on-air personality. Development of visual and vocal techniques relating to presentation of news, interviews, commercials and announcements.
3 Class Hours

COM/SOS 155 Media and Society **3 Credits**
An in depth examination and analysis of the impacts and effects of the mass media upon society and the converse societal influences upon the media. Includes such issues as media concentration, portrayal of violence, stereotyping, the public's right to know, among others.
3 Class Hours
Prerequisite: COM 100 or SOC 110

COM 200 Image Theory for Film Photography and Television — 3 Credits

Study of important theories of image production and effectiveness. Survey of several significant photographers, filmmakers, and television artists and their work. Emphasis on the formal elements of the still and moving image and their psychological and aesthetic effects.
3 Class Hours

COM 203 Beginning Filmmaking I — 3 Credits

Introduction to the craft of filmmaking. A hands-on approach to basic principles of photography, camera operation, lighting and editing used in the making of motion pictures. Introduction to sound recording. Students must pay their own film and laboratory fees.
2 Class Hours, 2 Laboratory Hours

COM 204 Filmmaking II — 3 Credits

Advanced work in filmmaking. The student will do hands-on work in both single system and double system sound. He will study scriptwriting, working with actors, and the business side of filmmaking. Each student will be expected to complete a brief film using double system sound as a final project. Students must pay for their own film and laboratory fees.
2 Class Hours, 2 Laboratory Hours
Prerequisite: COM 203 Filmmaking I

COM 210 Advanced Video Production — 3 Credits

This course stresses the application of basic video production theory and techniques as they apply to a variety of productions such as Advertisements, News, Drama, Sports or other such events. Students will be responsible for ideas, scripting, design, production, editing and evaluation of final projects. Both studio and portable systems will be available for student use.
2 Class Hours, 2 Studio Hours
Prerequisite: COM 130 Introduction to Video Theory and Production

COM 250 Internship (TBA) — 2-3 Credits

Placement in a communications related job. Involves in addition to job requirements, directed reading, meetings with the intern supervisor, and written assignments. Internships are not paid positions.

COM/THR 266 Acting for TV, Film and Commercials — 3 Credits

Proficiency in performing before the camera. Character analysis, quick-study, re-takes, voice-overs, studio projection, facial nuances, and subtlety of mannerism.
2 Class Hours, 2 Studio Hours

COM 299 Independent Study — 1-3 Credits

An individual student project concerned with advanced work in a special area of communication. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.(Requires application and approval.)
Prerequisite: 3 semester hours of college level work in communications

COMMUNITY INTERNSHIP

CTP 275 Community Internship — 3 Credits

A non-paid, supervised internship related to a student's planned major or career concentration. Arranged contractually with supervising faculty member. Involves, in addition to work at the placement site, periodic conferences with campus mentor, prescribed reading and written assignments. Students must have an overall "B" or 3.0 average to qualify. Requires personal interviews with campus mentor and intern site supervisor(s).

COMPUTER GRAPHICS

DEPARTMENT CHAIRPERSON, Gary E. Ostrander
Applied Technology Building, Room 013
Telephone 771-5337

The Computer Graphics Department services various College programs by offering required and elective courses in Computer Graphics. Courses are available to Broome Community College students days and evenings, and special contract courses are offered to employees of local industries in the College CAD Center and at industrial sites. Various technical and Engineering programs at Broome Community College have offered courses including three-dimensional modeling since the spring of 1982.

The College CAD Center currently has a Mainframe CAD System from IBM supporting courses in CADAM and CATIA as well as two networks of Engineering Workstations. A Local Area Network of SUN Microsystems 386i Workstations supports ARRIS Architectural Design software and Automatix AX4000 Mechanical Design software. A Local Area VAXcluster of DEC VAXStations supports SCICARDS Printed Circuit Board Design and SCIDESIGN Schematic Capture software.

Broome Community College has been designated by the New York State Education Department as a Resource and Development Center for Drafting Occupations and Graphics, Printing, and Visual Communications Occupations for New York State. The function is to serve as a clearing house between industry and education for matters relating to these fields.

CAD 150 Basic CADAM — 2 Credits

Introduction to the operation of CADAM System. Data base hierarchy. Construction of basic drawing elements. Display management. Manipulation of drawing elements. Creation of simple mechanical Layouts and detail drawings in two dimensions. Methods for efficient use of the CADAM System. Selected topics.
1 Class Hour, 2 Laboratory Hours
Prerequisite: Cartesian/Polar Coordinate Systems and background in engineering drawing.

CAD 151 Advanced CADAM — 2 Credits

Construction of advanced and specialized drawing projects, including mechanical layout and detail drawings. Use of all menu options for creating, modifying and manipulating elements. SPLINE function. Advanced use of NOTE, DIMENSION, Aux view and SYMBOL functions. Introduction to sets and attributes and the OVERLAY function. Selected topics.
1 Class Hour, 2 Laboratory Hours
Prerequisite: CAD 150 Basic CADAM

CAD 155 Architectural Applications — 1 Credit

Architectural applications on the College's CADAM System. Residential floor plans, elevations, sections, details, schedules. Dimensioning. Selected topics.
3 Laboratory Hours
Prerequisite: CAD 150 Basic CADAM, and CIV 119 or CIV 159 Architectural Drafting

CAD 205 Introduction to Computer Graphics with Architectural Applications — 3 Credits

Introduction to the operation of the College's Architectural CAD system - ARRIS. Construction, manipulation, and editing of basic drawing elements. Architectural applications using the Building Design and Drafting package and the Architectural Drafting and Documentation package - floor plans, sections, elevations, details. Use of symbol libraries; "smart walls"; automatic generation of materials lists, cost estimates, window and door schedules, elevation views. Introduction to 3D modeling and rendering.
2 Class Hours, 3 Laboratory Hours
Prerequisite: Cartesian/Polar Coordinate Systems and an acceptable background in engineering or architectural drawing.

CAD 211 Basic Mechanical Design — 2 Credits

Introduction to the College's Mechanical CAD System - (Automatix AX4000). Command structure, screen controls, and use of menus. Use of commands to draw and manipulate two-dimensional models. Command history files. Introduction to three dimensional work. Selected Topics.
1 Class Hour, 2 Laboratory Hours
Prerequisite: Cartesian/Polar Coordinate Systems and background in engineering drawing.

CAD 212 Detailing — 2 Credits

Use of the College's Mechanical CAD System (Automatix AX4000) to produce engineering production drawings from a three-dimensional model. Enhance the appearance of model geometry to meet drafting conventions. Text, Dimensions and Tolerancing to industry standards. Create drawing formats. Selected topics.
1 Class Hour, 2 Laboratory Hours
Prerequisite: CAD 211 Basic Mechanical Design

CAD 213 Intermediate Mechanical Design — 2 Credits

Use of the College's Mechanical CAD System (Automatix AX4000) to create and manipulate three-dimensional models. Multiple views of models including standard views and user defined views. Application to assemblies. Definition and intersection of basic surfaces. Selected topics.
1 Class Hour, 2 Laboratory Hours
Prerequisite: CAD 211 Basic Mechanical Design

CAD 214 Advanced Mechanical Design — 2 Credits

Use of the College's Mechanical CAD System (Automatix AX4000) in advanced applications. Mass properties of individual and composite volumes. Advanced surface work - commands and design approach. Applications to Descriptive Geometry - intersections, developments, B-Splines. Selected topics.
1 Class Hour, 2 Laboratory Hours
Prerequisite: CAD 213 Intermediate Mechanical Design and knowledge of Descriptive Geometry.

CAD 222 Printed Circuit Board Design — 2 Credits

Fundamentals of Computer-Aided Design applied to the electrical field. Use of the SCICARDS/SCIDESIGN System to construct library figures, schematic diagrams and printed circuit board layouts. Application of automatic placement and routing routines. Creation of files for checking, listing, and plotting.

1 Class Hours, 2 Laboratory Hours

Prerequisite: EET 150 Electronic Devices or equivalent industrial experience.

CAD 230 CAD System Operation — 3 Credit

System architecture - physical components. Hands-on experience. Building a system, day-to-day operating procedures, system failures and recovering procedures. Disc file management, magnetic tape back-ups, data security, and network management.

2 Class Hours, 4 Laboratory Hours

Prerequisite: One previous credit course from the Computer Graphics Department or equivalent industrial experience.

CAD 253 Basic CATIA — 2 Credits

Introduction to the operation of the CATIA System. Construction of 3D solid models. Display management. Manipulation of geometric elements and Boolean operations to construct multi-faceted solid models from primitive, common geometric shapes. Solid model transparency projection into 2D planes for standard orthographic views and dimensioning annotation. Introduction to libraries, layers and details. Methods of efficient use of the CATIA System, including storage and retrieval of models.

1 Class Hour, 2 Laboratory Hours

Prerequisite: Cartesian/Polar Coordinate Systems and background in engineering drawing.

CAD 254 Advanced CATIA — 2 Credits

Construction of complex geometric shapes with advanced curves and surfaces using the wireframe. Definition of planes and complex curved surfaces. Advanced CAE applications.

1 Class Hour, 2 Laboratory Hours

Prerequisite: CAD 253 Basic CATIA

CAD 299 Independent Study — 1-4 Credits

The student undertakes an independent project in his/her specialty under the guidance of a faculty member which is beyond the scope of courses currently offered by the department. Only one independent study course allowed per semester. Consideration may be given to a project involving a work assignment.

Prerequisite: Permission of Computer Graphics Chairperson

COMPUTER STUDIES

CST 101 Orientation — 0 Credits

An opportunity for students to receive information about advisement and registration, transfer, interview techniques. Listening to speakers from Broome Community College, from other colleges, and from business and industry. May be used as a common testing hour for multi-section courses. All full-time Computer Studies students are required to register for this course every semester.

CST 105 Understanding Computers* — 3 Credits

An introductory course in computer concepts. An integrated software package will be used to familiarize students with word processing, spreadsheets, and file management. Commercial packages from the students area of concentration may be presented.

2 Classes, 2 Laboratory Hours

Prerequisite or Corequisite: MAT 090B Elementary Algebra or Equivalent

*Students can not receive credit for both CST 105 **and** CST 107.

CST 107 Business Applications on the Microcomputer* — 3 Credits

Use of business applications software on the IBM PC. Hands-on experience with an integrated system that includes a word processor, spreadsheet, and database used as a problem solving tool. Commercial versions of other applications software may be explained and demonstrated.

3 Class Hours

Prerequisite: BUS 100 Accounting I and a proficiency in Typing.

*Students can not receive credit for both CST 105 **and** CST 107.

CST 108 Programming in Basic — 3 Credits

Introduction to computer programming using BASIC on the IBM-PC. No previous programming experience is necessary. Topics include input-output statements, IF-THEN statement, FOR-NEXT loops, WHILE loops, subscribed variables, string manipulation. Modular development and self documentation will be emphasized. MAY NOT BE TAKEN FOR DEGREE CREDIT BY COMPUTER STUDIES STUDENTS.

2 Class Hours, 2 Laboratory Hours

Prerequisite: MAT 090B Elementary Algebra or equivalent

CST 115 Introduction to Pascal — 3 Credits

Introduction to the fundamentals of structured programming using Pascal. Topics include input-output statements, data types, loop structures, procedures and functions, records. Lab assignments emphasize modular design and self documentation using examples from business rather than from mathematics. Programming will be done on the IBM-PC using Turbo Pascal. MAY NOT BE TAKEN FOR DEGREE CREDIT BY COMPUTER STUDIES STUDENTS. (See CST 132)

2 Class Hours, 2 Laboratory Hours

Prerequisite: MAT 090B Elementary Algebra or equivalent and an introduction to computing course

CST 116 RPG II and RPG III — 3 Credits

Fundamentals of RPG (Report Program Generation), a language used by many small business installations. Topics include specification sheets, internal logic, control breaks, branching, tables and table look-up. Lab assignments will be done in RPG II. Additional topics from RPG III will be discussed.

2 Class Hours 2 Laboratory Hours

Prerequisite: CST 105 Understanding Computers or CST 119 Computer Concepts and Applications.

CST 117 Language Independent Design Tools — 2 Credits

Whether you will be programming ADA, C, COBOL, FORTRAN, PASCAL, or any other High-Level language in use today, you will need to know proper design techniques. This 2-lecture hour course is designed to give you these LANGUAGE INDEPENDENT design tools. Topics covered include: modular design, logic flow representation techniques, how to perform a proper trace, subroutines, Binary and Hexadecimal arithmetic, and other fundamentals of software engineering. REQUIRED FOR COMPUTER STUDIES STUDENTS.

2 Class Hours

CST 118 Introduction to COBOL — 3 Credits

Introduction to the fundamentals of structured programming using COBOL. Business oriented lab problems will be assigned. Topics include structured design, use of files, report generation, control breaks, interactive techniques. MAY NOT BE TAKEN FOR DEGREE CREDIT BY COMPUTER STUDIES STUDENTS. (See CST 128)

2 Class Hours, 2 Laboratory Hours

Prerequisite: MAT 090B Elementary Algebra or equivalent and an introduction to computing course

CST 119 Computer Concepts and Applications — 2 Credits

A foundation course for computer studies majors who have had some exposure to computers. The lecture covers basic concepts in computers, the lab introduces the major end user software applications. Content includes computer hardware: input and output devices, memory, CPU, classification of computers; Historical development; social and ethical implications of computer: employment, crime, privacy. Lab exercises include word processing, file management, spreadsheets, graphics and operating systems. Students should have completed a high school computer science course of the equivalent. REQUIRED FOR COMPUTER STUDIES STUDENTS.

1 Class Hour, 2 Laboratory Hours

Prerequisite: A high school computer course or equivalent.

CST 122 Scientific Computer Programming-FORTRAN — 3 Credits

Introduction to problem solving techniques using FORTRAN including development of an algorithm, flow charting, program writing, debugging, storage, and execution, input and output, loop techniques, array manipulation, file control and control of on-line equipment, structured programming, terminal and batch operations. Material to be covered taken from student's area of study. For engineering technology students.

2 Class Hours, 2 Laboratory Hours

Prerequisite: Working knowledge of algebra and trigonometry

CST 124 Computer Programming for Engineering — 3 Credits

FORTRAN programming with applications in engineering, statistics and mathematics. Topics include syntax, looping, data representation, branching, functions and subroutines, multidimensional arrays. Simulation of engineering processes and graphical displays using CAD/CAM system.

2 Class Hours, 2 Laboratory Hours

Prerequisite: MAT 140 Trigonometry and EGR 150 Engineering Graphics

CST 128 Structured Programming in COBOL — 4 Credits

Problem solving using the structured programming techniques of COBOL. Top down design is emphasized. Programming steps include program definition, structure charts, coding, debugging, testing and validation, documentation and program maintenance. Topics include file handling, looping, program modularization, control breaks, tables, and interactive programming. Lab assignments reflect common business applications. FOR COMPUTER STUDIES STUDENTS. (Others see CST 118)

3 Class Hours, 2 Laboratory Hours

Prerequisite or Corequisite: CST 117 Language Independent Design Tools and CST 119 Computer Concepts and Applications

CST 130 PL/I — 3 Credits

Introduction to PL/I, a general purpose structured programming language capable of handling both scientific and business problems. Data types and attributes, declaration, assignment, control, iteration, arrays and structures, string techniques, procedures and blocks, functions, input/output, formatting.
2 Class Hours, 2 Laboratory Hours
Prerequisite: One programming language or permission of instructor.

CST 132 Structured Programming in Pascal — 4 Credits

Problem solving using the structured programming techniques of Pascal. Top down design and modular structure will be emphasized. Programming steps include program definition, structure charts, coding, debugging, testing and validation, documentation, program maintenance. Topics covered include loop structures, procedures, functions, scalar and ordinal types, arrays, records, and text files. Lab assignments will require modular structured programming. FOR COMPUTER STUDIES STUDENTS. (Others see CST 115)
3 Class Hours, 2 Laboratory Hours
Prerequisite or Corequisite: CST 117 Language Independent Design Tools and CST 119 Computer Concepts and Applications

CST 140 Computer for Chemists — 3 Credits

Introduction to the application of microcomputers to problems in chemistry. The principles of structured programming are examined, using BASIC and other high level packaged programs, including algorithm development, flow charting, debugging and execution. Introduction to the use of microcomputers to control laboratory equipment and to collect and process real-time data. For Chemical Engineering Technology students.
2 Class Hours, 2 Laboratory Hours
Corequisite: CHM 162 Chemistry or CHM 146 Chemistry and MAT 162 Applied Calculus I or Mat 181 Calculus I with Analytic Geometry I or permission of Chemistry Department Chairperson

CST 141 FORTRAN Programming with Graphic Applications — 3 Credits

Introduction to problem solving techniques using FORTRAN. Development of steps to solve a problem (algorithm), use of text editor, terminal operation, file storage and retrieval, program writing, debugging, execution and program documentation. Components include input/output, formatting, loop techniques, array manipulation, use of complex numbers, subroutines, sequential access data files. Graphic applications include figure creation, scaling, plots of X-Y data, equations and polar plots. For Electrical Engineering Technology students.
2 Class Hours, 2 Laboratory Hours
Corequisite: MAT 161 Precalculus

CST 155 C Programming for Programmers

This course assumes a complete understanding, and experience with, High-Level Language programming concepts. The course is designed to quickly take the student through necessary C syntax, on to more advanced topics. Topics covered will include: C Overview, variables, constants, Program Control, Arrays, structures, functions, preprocessors, pointers, input/output and more.
2 Class Hours, 2 Laboratory Hours
Prerequisites: CST 132 Structured Programming in Pascal, or CST 128 Structured Programming in COBOL: with a minimum grad of "C" or better.

CST 158 Spreadsheets with Financial Applications — 3 Credits

An introduction to commonly encountered financial calculations which can be done efficiently with a spreadsheet package. Topics include interest problems, amortization, capital depreciation, break-even analysis, and forecasting. Labs will be done on the IBM-PC using Lotus 1-2-3.
2 Class Hours, 2 Laboratory Hours
Prerequisite: MAT 139 College Algebra or equivalent and an Introduction to Computing Course

CST 160 ADA Programming

Introduction to module programming techniques using the ADA programming language. Presentation of the SYNTAX of the language. Emphasis will be made on the unique features of this language which includes generic subprograms and packages, private and access types, tasking, parallel computation and exception handling.
2 Class Hours, 2 Laboratory Hours
Prerequisite: MAT 161 Precalculus or equivalent and one of the following: CST 132 Structures Programming in Pascal, CST 128 Structures Programming to Cobol, CST 115 Introduction to Pascal, permission of the instructor.

CST 170 Digital Logic — 3 Credits

Comprehensive coverage of basic gates. Boolean algebra, Karnaugh mapping and Quine McCluskey technique for circuit simplification. Adders, subtractors, multiplexers, code converters, asynchronous and synchronous counters presented in detail as basic computer building blocks. Analog-digital and digital-analog interfacing. Lab exercises utilize TTL and CMOS chips.
2 Class Hours, 2 Laboratory Hours
Prerequisite or Corequisite: CST 132 Structured Programming in Pascal and CST 117 Language Independent Design Tools.

CST 180 FORTRAN, A Second Course — 3 Credits

For students with previous programming experience in another programming language. Problem solving using structured FORTRAN. Complete program development including definition, FORTRAN coding, debugging and testing. Full documentation required for each program including a structure chart and a program logic manual. Topics include: loop and branch structures, arrays, subprograms, data types, formatted and list directed input/output, data structures, sequential and random access files, buffers and unformatted input/output. May include techniques in creating graphics drivers.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 132 Structured Programming in Pascal or permission of instructor

CST 181 IBM Assembler Language — 3 Credits

System/360 and 370 hardware and software overview, program design, test, debug, documentation and execution, addressing, standard linkage conventions, input/output techniques and data sets, instruction formats, machine and assembly code, data storage and boundaries, logical instructions, fixed-point binary arithmetic, decimal arithmetic, subroutines, branching and looping, macros.
2 Class Hours, 2 Laboratory Hours
Prerequisites: Introduction to computer programming course and at least one intensive structured programming language course

CST 200 Systems Analysis I — 3 Credits

A first course dealing with the principles of systems analysis and problem solving, concentrating on investigation and analysis of systems and their resulting design. The importance of standards, procedures, documentation and design tools. A team case study used to develop a design for a new system.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 128 Structured Programming in COBOL

CST 201 Systems Analysis II — 3 Credits

Continuation of the principles of systems analysis with a concentration on systems development, implementation and evaluation. A team case study approach used to develop a system based on previously completed analysis and design. Programs written using COBOL and structured programming techniques. Writing Emphasis Course.
2 Class Hours, 2 Laboratory Hours
Prerequisite: "C" grade or better in both CST 218 Advanced COBOL, and CST 200 Systems Analysis I

CST 202 Advanced Pascal with Data Structures — 3 Credits

Static and dynamic data structures. Choice of proper structure to organize data. Topics include arrays, records, files, linked lists, trees, stacks, queues, directed graphs. Lab work will introduce applications of the topics and will be done on the IBM-PC in Turbo Pascal. Structured modular programming is required. Writing Emphasis Course.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 132 Structured Programming in Pascal with a Grade "C" or better

CST 213 Databases — 3 Credit

Concepts of information structures. Linked-list, hierarchical, network, and relational database models.Application development with database systems. Database administration, multi-user systems, data security. Labs will use both mainframe and microcomputer database systems.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 128 Structured Programming in COBOL or CST 132 Structured Programming in Pascal

CST 214 Computer Operations: Procedures and Management — 3 Credits

A broad based course introducing the concepts of operations and scheduling in the computer center environment. An overview of some of the concepts of operating systems. Operating systems such as UNIX, PC-DOS, and VMS will be reviewed. This course will NOT involve writing operating system programs. Topics include Job Control Language, command files, computer center operations, scheduling, high-level programming tools. Labs will provide hands-on experience with operations and systems.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 128 Structured Programming in COBOL or CST 132 Structured Programming in Pascal

CST 218 Advanced COBOL — 3 Credits

A second course in the use of COBOL language as a means of implementing computerized solutions to data processing problems. Batch interactive processing, various file access techniques, use of advanced language statements and of various utilities to the COBOL programmer. Writing Emphasis Course.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 128 Structured Programming in COBOL with C grade or better

CST 220 Microprocessors and Assembly Language Programming — 3 Credits

An introduction to microcomputer and coprocessor architecture using the Intel family from 8088 through 80386 and 8087 through 80387. Programming modes, branching, flags, stacks, subroutines, interrupts, procedures and interfacing. Extensive assembly language programming to reinforce these concepts. Programming concepts include fundamental arithmetic operations, multiple precision using the coprocessor, string handling, logic operations.
2 Class Hours, 2 Laboratory Hours
Prerequisite: One structured Programming Language
Corequisite or prerequisite: CST 170 Digital Logic

CST 225 Introduction to Small Systems — 3 Credits

Introduction to the concepts and implementation of small computer systems. Hardware and software techniques, Keyboards, display terminals, printers, graphics, magnetic storage, disk drives, disk operating systems, telecommunications techniques, and networking. Extensive use of the IBM-PC in the laboratory will reinforce classroom concepts. Writing Emphasis Course.
2 Class Hours, 2 Laboratory Hours
Prerequisite: CST 220 Microprocessors and Assembly Language Programming with a "C" grade or better and CST 132 Structured Programming in Pascal

CST 228 C—Fundamentals, Applications & Techniques — 3 Credits

For students with previous programming experience in Pascal and Assembly Language. Fundamental C topics include: Structure of C programs, variables, constants, arithmetic and logic operations, input and output, loops, conditional statements and branching, parameter passing, and use of standard C libraries. Advantages and disadvantages of C as a programming language. More advanced topics include: memory models, interrupt functions, assembly language interfacing and use of additional C libraries. Laboratory work and projects will be required for this course.
2 Class Hours, 2 Laboratory Hours
Prerequisites: CST 132 Structured Programming in Pascal
Pre- or Corequisites: CST 220 Microprocessors and Assembly Language Programming.

CST 297 Cooperative Work Experience — 1-3 Credits

Cooperative education in computing may be available. On-the-job experience may be obtained by working with businesses, industries and offices whose operations require the use of computers. To be eligible a student must maintain a cumulative grade point average of 2.5 with a 3.0 average in CST courses and have no F grades.

CST 299 Independent Study — 1-3 Credits

The student undertakes an independent project, under the guidance of a faculty member, which is beyond the scope of courses currently offered by the department. Only one independent study project allowed per semester.

CRIMINAL JUSTICE

Criminal Justice (CRJ) courses may not be used to satisfy the Social Science requirement.

The Criminal Justice program was developed with great flexibility in course selection and can be taken on a part-time basis by those individuals currently employed in the field. Those students who wish to pursue it on a full-time basis should contact the Program Coordinator of Criminal Justice. Very close planning and advisement will be necessary to pursue this program to its completion in two years.

CRJ 100 Criminal Justice Orientation — ½ Credit

Introduction to Criminal Justice, career opportunities, transfer opportunities, study skills, and college services. Guest speakers from various police agencies and Criminal Justice Association will augment instruction. This course required for all Criminal Justice majors.
1 Hour per week fo 10 weeks.

CRJ 101 Introduction to Criminal Justice — 3 Credits

Overview of the major components of the criminal justice system: law enforcement, prosecution, trial courts and corrections. A systems approach is utilized with an emphasis on the structure, functions and independence of these and other criminal justice system components.
3 Class Hours

CRJ 105 Introduction to Corrections — 3 Credits

Overview of the corrections components of the criminal justice system, tracing the history of corrections in the United States. Relationships and interdependencies of corrections with the court and law enforcement components of the criminal justice system and a discussion of the theoretical basis for the four major types of correctional models.
3 Class Hours

CRJ 115 Juvenile Justice System — 3 Credits

Overview of the juvenile system, including the history, process, status and philosophy of the juvenile court. Law enforcement handling of juveniles, various theories of delinquency causation, correctional programs and alternative methods of dealing with juvenile offenders.
3 Class Hours

THE FOLLOWING CRIMINAL JUSTICE COURSES ARE TAUGHT IN THE EVENING ONLY

*CRJ 125 Penal Law — 3 Credits

Essential elements of the various crimes under the New York State Penal Law. The concepts of culpability and criminal defenses recognized under the New York State Penal Law as they relate to murder, rape, robbery, burglary, arson, assault, drug offenses, disorderly conduct and harassment.
3 Class Hours

*CRJ 130 Introduction to Security — 3 Credits

Organization and management of the security function in industry, business, government and institutions. The protection of personnel, facilities and other assets, as well as administrative, legal and technical problems of loss prevention and control.
3 Class Hours

*CRJ 212 Criminal Procedure and Constitutional Law — 3 Credits

The right to counsel, search and seizure, confessions, lineups, electronic surveillance, probation and parole. Writing Emphasis Course.
3 Class Hours

*CRJ 215 Police Administration — 3 Credits

Fundamentals of organization, supervision and over-all management of police and civilian personnel. Designed to supply a background for the student in dealing with the complexities involved in the management aspect of various police agencies.
3 Class Hours
Prerequisite: CRJ 101 Introduction to Criminal Justice

*CRJ 225 Security Administration — 3 Credits

Administration of public and private security efforts: problems in protection program development and evaluation, functions of various levels of personnel, company/organizational relations, documents and personnel access control, detection systems, devices, and equipment, emergency and disaster planning, new directions in the field of security.
3 Class Hours
Prerequisite: CRJ 130 Introduction to Security or permission of the instructor/ department chairperson.

*CRJ 230 Criminal Investigation — 3 Credits

Basic principles of investigation as they relate to the collection, preservation, identification and examination of physical evidence. Techniques for locating and interviewing witnesses and interrogating suspects.
3 Class Hours
Prerequisite: CRJ 101 Introduction to Criminal Justice and CRJ 125 Penal Law

*CRJ 255 Special Topics in Criminal Justice — 1-3 Credits

The specific area to be covered will be based upon identified needs and interests of criminal justice students. This course also provides a forum for professional individuals in the criminal justice field with a particular expertise to share their knowledge and skills with students. Special topics have included Criminalistics, Police Community Relations, Drug Law, and Current Legal Issues.
1-3 Class Hours
Prerequisite: CRJ 101 Introduction to Criminal Justice and 2 other CRJ courses.

CRJ 260 Organized Crime — 3 Credits

Role of legal system in organized crime control, preventative methods, political influences; white collar crime, methods of intelligence gathering; relationships of organized crime to community social structure.
3 Class Hours
Prerequisite: CRJ 101 Introduction to Criminal Justice department permission

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

CRJ 299 Independent Study **1-3 Credits**
An individual student project concerned with advanced level work beyond the scope of breadth of regular courses. A specific area or topic is investigated under the direction of a faculty member. Must be approved by department chairperson.
Prerequisite: CRJ 101 Introduction to Criminal Justice and 6 credits in CRJ courses

NOTE: See page 93 for description of CHM 121 Forensic Science.

DENTAL HYGIENE

DEN 101 Dental Hygiene I **2 Credits**
Contemporary practice of dental hygiene and factors affecting such practice. Basic techniques of preparation for the dental hygiene appointment, patient evaluation and patient treatment.
2 Class Hours
Corequisite: DEN 101L Dental Hygiene Laboratory

DEN 101L Dental Hygiene Laboratory **2 Credits**
Practical application in an actual clinical setting of the principles described in lecture mode of the course.
6 Laboratory Hours
Corequisite: DEN 101 Dental Hygiene I

DEN 102 Dental Hygiene II **4 Credits**
Continuation of DEN 101 Dental Hygiene I. Clinical experience in the basic techniques of dental hygiene care including patient appraisal, treatment planning, instrumentation and patient oral health instruction. Theory in ethics, jurisprudence, professional organizations, emergency medical and dental procedures and care of patients with special medical problems and oral physiotherapy and oral health instruction.
4 Class Hours
Prerequisites: DEN 101 Dental Hygiene I, and DEN 103 Oral Anatomy and Physiology; BIO 131 Human Biology I or permission of the department.
Corequisite: DEN 102L Dental Hygiene II Clinic

DEN 102L Dental Hygiene Clinic **2 Credits**
Clinical dental hygiene practice.
8 Laboratory Hours
Corequisite: DEN 102 Dental Hygiene II

DEN 103 Oral Anatomy and Physiology **2 Credits**
Normal structure and function of the oral cavity (microscopic and gross).
2 Class Hours,
Corequisite: DEN 103L Oral Anatomy and Physiology Laboratory

DEN 103L Oral Anatomy and Physiology Laboratory **2 credits**
Laboratory work provides experience with microscopic and macroscopic study of structures in the oral cavity.
4 Laboratory Hours

DEN 106 Clinical Dental Radiography **1 Credit**
Radiation physics and biology; understanding of radiation health, safety and protection; radiograph film quality, intraoral dental radiographic techniques, film processing and mounting, interpretation of radiographic factors and recognition of anatomical landmarks.
1 Class Hour
Prerequisite: DEN 101 Dental Hygiene I, DEN 103 Oral Anatomy and Physiology; BIO 131 Human Biology I or permission of the instructor
Corequisite: DEN 106L Clinical Dental Radiography Laboratory

DEN 106L Clinical Dental Radiography Laboratory **1 Credit**
Practical application on manikins and patients of principles described in lecture mode.
2 Laboratory Hours
Corequisite: DEN 106 Clinical Dental Radiography

DEN 110 Dental Materials **3 Credits**
Composition, chemical and physical properties and use of materials used in dental laboratory and operatory. Laboratory sessions will provide experience in performing common dental laboratory procedures and background for clinical application of expanded functions.
2 Class Hours, 3 Laboratory Hours
Prerequisite: DEN 103 Oral Anatomy and Physiology or permission of the instructor

DEN 201 Dental Hygiene III **2 Credits**
Continuation of DEN 102 Dental Hygiene II. Integration of theory with clinical experience in various oral hygiene preventative procedures. Emphasis on planning and execution of the total patient treatment.
2 Class Hours
Prerequisite: DEN 102 Dental Hygiene II, DEN 106 Clinical Dental Radiography, DEN 110 Dental Materials, BIO 160 Microbiology, BIO 131 Human Biology I and BIO 132 Human Biology II.
Corequisite: DEN 201L Dental Hygiene III Clinic

DEN 201L Dental Hygiene III Clinic **3 Credits**
Clinical dental hygiene practice.
12 Laboratory Hours
Corequisite: DEN 201 Dental Hygiene III

DEN 202 Dental Hygiene IV **2 Credits**
Continuation of DEN 201 Dental Hygiene III. Comprehensive clinical experience in all phases of dental hygiene practice. Introduction to computer use in dental office management.
2 Class Hours
Prerequisite: DEN 201 Dental Hygiene III, DEN 204 General and Oral Pathology, DEN 205 Periodontology and DEN 209 Nutrition
Corequisite: DEN 202L Dental Hygiene IV Clinic

DEN 202 L Dental Hygiene IV Clinic **3 Credits**
Clinical dental hygiene practice.
12 Laboratory Hours
Corequisite: DEN 202 Dental Hygiene IV

DEN 204 General and Oral Pathology **3 Credits**
Broad picture of the disease process through the study of common general diseases, their cause, results and treatment. Emphasis on the principles of inflammation, healing and repair, oral disease, their causes, recognition and treatment.
3 Class Hours
Prerequisite: DEN 102 Dental Hygiene II, BIO 132 Human Biology and BIO 160 Microbiology or permission of the instructor

DEN 205 Periodontology **2 Credits**
Overall study of the pathology of the supporting structures surrounding the teeth. Special emphasis on recognition and treatment of the periodontal patient within the scope of the dental hygienist.
2 Class Hours
Prerequisite: DEN 102 Dental Hygiene II, DEN 106 Clinical Dental Radiography, BIO 132 Human Biology II and BIO 160 Mircrobiology or permission of the instructor.

DEN 206 Dental Pharmacology **2 Credits**
Pharmacology as it affects the clinical practice of dental hygiene and dentistry. Drugs commonly used in dentistry and correct methods for their use. Emphasis on pharmacological aspects of anesthesia.
2 Class Hours
Prerequisite: DEN 201 Dental Hygiene III or permission of the instructor

DEN 209 Nutrition **3 Credits**
Basic nutrition principles, including metabolism, functions, sources, and conditions resulting from excessive or inadequate intake of each nutrient. Study of diet planning, dietary guidelines, weight control, nutrition care throughout the life cycle., and current nutrition topics. Special emphasis on the relation of nutrition to the oral cavity, interviewing, nutritional counseling, computer aided dietary analysis, and its practice in the dental office. Writing Emphasis Course.
3 Class Hours
Prerequisite: DEN 102 Dental Hygiene II or permission of the instructor

DEN 213 Public Health **3 Credits**
Principles of public health and fundamentals of assessing, planning, implementing and evaluating of public health care with emphasis on community dental health. Laboratory experience in assessing, planning, implementing and evaluating care for a particular target population.
2 Class Hours, 2 Laboratory Hours
Prerequisite: DEN 102 Dental Hygiene II

DEN 214 Dental Specialties **2 Credits**
Overview of dental specialities with emphasis on those specialities not covered in other courses in the Dental Hygiene curriculum-endodontics, orthodontics, pedodontics.
2 Class Hours
Prerequisite: DEN 201 Dental Hygiene III or permission of the instructor

DEN 298 Independent Study - Fall **1-3 Credits**
Advanced studies in Dental Hygiene conducted under the guidance of a Dental Hygiene instructor.
Prerequisite: DEN 101, 102 Dental Hygiene I and II and permission of Department Chairperson

DEN 299 Independent Study - Spring **1-3 Credits**
Advanced studies in Dental Hygiene conducted under the guidance of a Dental Hygiene instructor.
Prerequisite: DEN 101, 102 Dental Hygiene I and II and permission of Department Chairperson

DIETARY MANAGER

These courses are designed for individuals already employed in the food service field, as there is a requirement for supervised work experience with a Registered Dietitian. All persons entering the program are responsible for finding a preceptor, and registrations are on a pre-application basis.

DIA 101 Nutrition **3 Credits**
The social, cultural, psychological and physiological functions of food. Nutrition care throughout the life cycle. Special consideration given to modifications of the basic diet to meet the needs of the resident in health care facilities. Techniques of interviewing, medical ethics and documentation procedures of medical records.
2 Class Hours, 4 Directed Practice

DIA 102 Institutional Food Preparation **3 Credits**
Principles of food preparation, standardization of recipes, menu structure and planning. Serving, merchandising and promotion of food items. Emphasis on sanitation and safety practices in food service departments.
2 Class Hours, 4 Directed Practice

DIA 201 Food Management Systems **3 Credits**
Introduction to the health field and its interrelationships. Control through specification, purchasing, inventory, cost analysis. Equipment maintenance and management safety practices.
2 Class Hours, 4 Directed Practice

DIA 202 Personnel Management **3 Credits**
Leadership and supervisory techniques. Concepts of management including the principles of organizing, evaluating, and the decision-making process. Implications of authority and responsibilities. Understanding and communications with workers and co-workers. Employee recruitment, training and evaluation. Morale and labor relations.
2 Class Hours, 4 Directed Practice

EARLY CHILDHOOD

Early Childhood (ECE) courses may not be used to satisfy the Social Science requirement.

The Early Childhood program was developed with great flexibility in course selection and can be taken on a part-time basis by those individuals currently employed in the field. Those students who wish to pursue it on a full-time basis should contact the program Coordinator of Early Childhood. Very close planning and advisement will be necessary to pursue this program to its completion in two years.

MOST EARLY CHILDHOOD COURSES (THOSE WITH ECE DESIGNATION) ARE OFFERED ONLY IN THE EVENING. FULL-TIME EARLY CHILDHOOD STUDENTS MUST PLAN FOR BOTH DAY AND EVENING CLASSES.

***ECE 100 Introduction to Education of Young Children** **3 Credits**
An over-all view of early childhood education and where it is going. Discussion of various philosophies and methods, programming, scheduling (what should go into scheduling a day for a pre-schooler and when). Focus on social, emotional and physical needs of young children and the importance of the "self concept" for both the child and the adult working with young children, Introduction to the College's Early Childhood program covering requirements, courses and career information. A required number of observations in pre-schools, nurseries and day care centers in the area, as well as special laboratory conferences. Required of Early Childhood majors.
2 Class Hours, 2 Laboratory Hours

***TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS**

***ECE 115 Music for Young Children** **3 Credits**
How to develop the whole child through the use of music. This course will be of practical application for the teacher. Various techniques and methods will be demonstrated through the use of songs, records, eurhythmics, rhythm instruments and creative activities. Class participation will be a vital part of this course. Students will be expected to apply these various methods and activities with young children.
3 Class Hours

ECE 120 Curriculum Development **3 Credits**
Implementation of early childhood curriculum per developmental level in art, music, creative movement, language, mathematics, sciences, nutrition and health, manipulative play, and dramatics. Students are required to plan and present activities that recognize the "whole child" (socially, emotionally, cognitively, creatively, and physically) and her/his developmental abilities. Required of Early Childhood majors.
2 Class Hours, 2 Laboratory Hours
Prerequisite: ECE 100 Introduction to Education of Young Children or Concurrent Enrollment

***ECE 140 Art for Young Children** **3 Credits**
In-depth coverage of art education as it contributes to the pre-school child's emotional, physical and psychological growth. Needs of pre-schoolers in this area and ways to foster creativity and skill acquisition. Materials and methods appropriate for this age. A laboratory experience working with pre-schoolers in art will be required.
2 Class Hours, 2 Laboratory Hours

***ECE 150 Motor Development** **3 Credits**
Designed to give the student an understanding of normal motor development and how it relates to cognitive and perceptual development. Students will be exposed to programs and activities in motor development for young children.
3 Class Hours

ECE 160 Nutrition for Young Children **3 Credits**
Basics of good nutrition with emphasis on children.Ideas on planning and preparing snacks and meals and teaching good nutrition habits to children. Ideas on fitting nutrition into the nursery education curriculum and tying it to other subjects. Projects for practical application and experience in a nursery school setting.
3 Class Hours

***ECE 170 Practicum I** **3 Credits**
Designed to meet the needs of both the experienced and the inexperienced students. The inexperienced student is placed in a classroom setting conducive to the learning of desired teacher competencies, working with an experienced supervising teacher. Six hours per week for 12 weeks in this situation. Self-evaluation as well as being evaluated by others. The experienced student continues working in early childhood setting. The practicum emphasizes self-evaluation according to classroom competencies. Both experienced and inexperienced students in group seminars with a college representative and meeting for individual consultation. Required of Early Childhood Majors. Writing Emphasis Course.
Prerequisite: 30 hours of counseled coursework Taught Evenings, field work days

ECE 175 Techniques of Observation and Evaluation **3 Credits**
Develops skills and methods of observing young children in structured and unstructured situations. Covers ethics, interpretations of children's behavior in light of development. Also record keeping techniques, projects using data gathered to evaluate children's abilities. Implications of evaluations. Required of Early Childhood Majors.
3 Class Hours

ECE 180 Child Health and Safety **3 Credits**
Designed to help students become aware of techniques for promoting general health care and safety standards at children's centers.
3 Class Hours

ECE 190 Infants, Toddlers and the Family **3 Credits**
The mother/father/baby triad and the challenges that parenting brings to the young family are examined. Single parents, parental attachment, adoption, positive self image, infant stimulation, teen pregnancy, community support for families, toddler discipline, delayed pregnancy. Gives prospective parents and teachers of young children insight into this critical period of life.
3 Class Hours

***TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS**

***ECE 210 Special Problems in Children** **3 Credits**
How to understand and help the child with a special problem. Normal adjustment problems, learning disabilities, physical handicaps, retardation and the emotionally disturbed child. Techniques for the classroom teacher and places to get help. Actual student involvement with children who exhibit these problems.
2 Class Hours, 2 Laboratory Hours
Prerequisite: PSY 211 Child Development (Concurrent Enrollment Considered)

***ECE 220 Issues and Innovations in Early Childhood Education** **3 Credits**
An overview and insight into various philosophies and materials of education for young children, including Montessori, Piaget, open education (comparing English and American schools), affecting education, behaviour modificatioon. This course aims to develop the competency of the student through practical application.
3 Class Hours
Prerequisite: ECE 100 Introduction to Education of Young Children

***ECE 230 Working with Parents in Early Childhood Programs** **3 Credits**
Designed to introduce the need for the parent's involvement in the education of the young child. Benefits for teachers and parents which help or hinder their working together. Various aspects of working with parents, such as home visiting, group parent meetings, newsletters and written communications, parent conferences and the use of volunteers in the classroom. Part of the course on a workshop basis, and students required to develop a special project to earn their third credit.
2 Class Hours, 2 Laboratory Hours
Prerequisite: ECE 100 Introduction to Education of Young Children

***ECE 245 Social Development of Young Children** **3 Credits**
Explores the developmental, environmental and temperamental aspects of the socialization process. Topics include aggression, cooperation and sharing, moral development, peer interaction, sex-role development, communication in the classroom.
3 Class Hours

***ECE 250 Language in Early Childhood** **3 Credits**
A developmental study of language growth in young children and its influence on learning (cognitive abilities, social and behavioral concepts). Contemporary language theories and programs including a diagnostic approach to teaching language (communications skills, reading readiness and literature appreciation) in the pre-school. The student will be expected to spend a number of hours in a special project requiring observation of individual children and language arts program.
3 Class Hours
Prerequisite: ECE 100 Introduction to Education of Young Children or Concurrent Enrollment

***ECE 290 Practicum II** **6 Credits**
Designed to be flexible depending upon the needs and interest of the student. Approved projects for experienced students based on the development of these needs and interests. All students meet in group seminars for exchange of ideas. Inexperienced students use classroom situations to conduct self-evaluations of own competencies as teachers,and are evaluated by others, including an experienced supervising teacher. The inexperienced student to spend nine hours per week in a classroom situation for 12 weeks. Required of Early Childhood majors. Students employed in early childhood setting continue at place of employment and are required to observe other centers.
Prerequisite: ECE 170 Practicum I
Taught evenings, field work days

***ECE 299 Independent Study in Child Care** **1-3 Credits**
An individual student project in child care beyond the scope of requirements offered by the department. Under the direction of a faculty member and approved by the program coordinator and department chairman. No more than three credits may be acquired toward the Early Childhood degree in independent study projects.
1-3 Class Hours
Prerequisite: 6 Semester hours in Early Childhood courses

***TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS**

ECONOMICS

ECO 101 Consumer Economics **3 Credits**
Institutions and forces directly affecting the consumer, consumer income and expenditure patterns, personal finance, credit and tax problems, personal investment alternatives. Impact of the consumer movement on the individual and society.
3 Class Hours

ECO 104 Labor Economics and American Industry **3 Credits**
Interaction among business, labor and government. Analysis of the causes of unemployment and income inequality. Connection among productivity, wages, prices and employment and application of anti-trust and labor laws to firms and unions.
3 Class Hours

ECO 110 Introduction to Micro-Economics **3 Credits**
Supply, demand and the market system as they relate to contemporary economic problems including poverty, energy, the environment and urban decay. The allocation of resources under conditions of competition and various degrees of monopoly. Rationale behind anti-trust laws and other economic systems.
3 Class Hours

ECO 111 Introduction to Macro-Economics **3 Credits**
Causes of unemployment and inflation and the government's efforts to control them. Problems of economic growth as they relate to our economy and the other countries, developed and underdeveloped. International trade and finance problems.
3 Class Hours

ECO 140 Economics of Urban Problems **3 Credits**
Application of economic analysis to urban problems, an understanding of the economic forces that affect housing, transportation, poverty, crime, land use, the financing of urban services and the urban future.
(Not offered in 1988-89)
3 Class Hours

ECO 253 Money and Banking **3 Credits**
An examination of money, credit and financial institutions, emphasizing how the monetary system influences economic activity. Nature and functions of money, the commercial banking system and other financial institutions, the roles of the Federal Reserve System and the Treasury, monetary policy and international money problems.
3 Class Hours
Prerequisite: ECO 111 Introduction to Macro-Economics

ECO 299 Independent Study - Economics **1-3 Credits**
An individual student project in economics which is beyond the scope or requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.
Prerequisite: 3 Semester hours is economic

ELECTRICAL ENGINEERING TECHNOLOGY

EET 100 Introduction to Electrical Engineering Technology **½ Credit**
Introduction to Electrical Engineering Technology, career opportunities, transfer opportunities, study skills and college services. An association with industry is established through field trips and panel discussions involving industry representatives. Reasonable proficiency in the use of hand held calculator is developed. A scientific hand held calculator is required for this course.
1 Class Hour

EET 110 Introduction to Electricity **3 Credits**
Basic electrical circuit elements including voltage sources, light bulbs, resistors, heater elements, capacitors, and inductors. Simple series and parallel resistive circuits. Time constants related to capacitors and inductors. Use of basic meters to measure voltage, current, and resistance. An introduction to the oscilloscope. Reading charts and tables. Use of computers and the BASIC language to solve simple circuit problems.
3 Class Hours

‡EET 111 Electrical Construction Laboratory I **2 Credits**
Advanced knowledge about today's electrical equipment. Experience in the installation, fabrication and maintenance of electrical equipment by means of "hands on" approach. Shop safety and the National Electrical Code. Basic residential and commercial wiring procedures, basic measuring techniques, fundamentals of basic machine operations. Safety Glasses are required for this course.
1 Class Hour, 3 Laboratory Hours

EET 112 Electrical Construction Laboratory II **1 Credit**
Advanced wiring methods, fractional horsepower motor and appliance troubleshooting, introduction to residential and commercial lighting and power lay-out design. Safety glasses are required for this course.
3 Laboratory Hours
Prerequisite: EET 111 Electrical Construction Laboratory I

†EET 121 Electrical Circuits & Laboratory **4,1 Credits**
Fundamentals of electrical circuits and application of circuit laws, theorems and measuring techniques to both DC and AC single and polyphase circuits.
4 Class Hours, 3 Laboratory Hours
Prerequisite or Corequisite: MAT 139 and MAT 140 or equivalent.

***‡EET 125 Circuits I** **3 Credits**
DC circuits, including loop and nodal analysis, superposition, Thevenin's and Norton's theorems, RL and RC time constants.
2 Class Hours, 2 Laboratory Hours
Prerequisite or Corequisite: MAT 139 Algebra or equivalent

***‡EET 126 Circuits II** **3 Credits**
A continuation of the study of circuits concepts related to single and three-phase alternating current. Resonance, network analysis, power.
2 Class Hours, 2 Laboratory Hours
Prerequisite or Corequisite: MAT 140 Trigonometry or equivalent and EET 125 Circuits I.

EET 130 Engineering Drawing **1 Credit**
Principles of projection. Development of drafting skills, lettering and proper line construction. Dimensioning and tolerancing, with an emphasis on shop processes. Use of auxiliary views and sectioning. Preparation for assembly drawings, materials lists, schematic and wiring diagrams.
3 Laboratory Hours

† EET 150 Electronic Devices & Laboratory **4,1 Credits**
A first course in Electronics introducing the devices fundamental to the field. Introduction of semiconductor diodes, bipolar and field effect transistors, thyristors, operational amplifiers, microprocessors. Design and analyze representative circuits based on these building blocks. Competency in FORTRAN IV computer language is required and is applied to generate software for design and analysis of related circuits. Writing Emphasis Course.
4 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 161 Pre-calculus and CST 141 FORTRAN Programming with Graphic Applications and EET 121 Electrical Circuits

EET 162 Computer Aided Network Analysis **3 Credits**
Computer analysis of complex electrical and electronic networks by application of network theorems and application of software as needed. Use of a second computer language to display the response of two port networks. Use of the computer to apply matrix methods to the analysis of complex circuits and the solution of network problems.
3 Class Hours
Prerequisite: CST 141 FORTRAN Programming with Graphic Applications and EET 121 Electrical Circuits and MAT 161 Pre-calculus

‡EET 181 Installation and Maintenance of Electrical Motors **2 Credits**
Theory, operation and application of electrical machines and control systems as related to industry. Installation, maintenance and trouble-shooting of electrical motors and control systems emphasized.
1 Class Hour, 2 Laboratory Hours

‡EET 183 Applied Electricity **3 Credits**
Practical applications of electrical concepts as applied to basic circuits, motors and transducers. Laboratory work includes demonstration of basic electrical concepts using measuring instruments such as digital multimeters, oscilloscopes, function generators, counters, wattmeters, bridges and transducers as sensors.
2 Class Hours, 3 Laboratory Hours
Prerequisite: PHY 142 Physics and MAT 161 Pre-calculus

***TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS**
†These courses carry separate grades for lecture and laboratory
‡Combined lecture-laboratory courses; final grade depends on successful completion of both parts.

‡EET 186 Electronics **3 Credits**
Practical applications of electronic concepts as applied to solid state devices, amplifiers, power supplies, oscillators, timers, multivibrators and basic logic devices and transducers. Laboratory work includes practical applications of concepts by students, operation of common electronic instruments such as oscilloscope, curve tracer, function generator and counter.
2 Class Hours, 3 Laboratory Hours
Prerequisite: EET 183 Applied Electricity

EET 230 Electronic Design and Fabrication **1 Credit**
Selection, package design and construction of an electronic project and preparation of related drawings. Use of various manufacturing processes to fabricate the project. Use of industrial standard drafting practices to properly describe the operations. Chassis layout, printed circuit board design, exposure, and machining, wiring, soldering and enclosure fabrication are required.
3 Laboratory Hours
Prerequisite:EET 112 Electrical Construction Laboratory II and EET 130 Engineering Drawing and EET 251 Electronic Circuitry & Laboratory

***‡EET 235 Electrical and Electronics Drawing** **2 Credits**
Graphic representation of circuitry related to the electrical and electronics fields. Use of industrial standards and symbolism to draw electronic, schematic and wiring diagrams, printed circuit layout and electronics assemblies. Construction of one-line power distribution diagrams, industrial motor control diagrams and commercial lighting layout.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MET 113 Engineering Drawing and EET 225 Electronics I

†EET 243 Energy Conversions & Laboratory **4,1 Credits**
Theory, operation and application of d-c and a-c motors and generators, and their magnetic and solid state control. Theory and application of single and polyphase power transformers and rectifiers. Writing Emphasis Course.
4 Class Hours, 3 Laboratory Hours
Prerequisite: EET 150 Electronic Devices

†EET 244 Control Systems & Laboratory **3,1 Credits**
Theory, operation and application of AC and DC servo systems, industrial robots and process control techniques. Theory of open and closed loop systems.
3 Class Hours, 3 Laboratory Hours
Prerequisite: EET 243 Energy Conversions and Laboratory

***‡EET 245 Energy Conversions and Control Systems** **4 Credits**
DC and AC electrical machines theory, applications, and control. Single phase and polyphase power transformers and rectifiers. Application of industrial control systems.
3 Class Hours, 2 Laboratory Hours
Prerequisite: EET 126 Circuits II

†EET 251 Electronic Circuitry & Laboratory **3,1 Credits**
A second course in Electronics that incorporates the devices introduced in EET 150 Electronic Devices into representative circuits of moderate complexity. These include multi-stage tuned amplifiers, instrument and transducer amplifiers, op-amp active filters and other related data acquisition circuits. Practical considerations including heat sinking, noise, electromagnetic interference, and appropriate device selection. The BASIC and FORTRAN IV computer languages are required for applications software used to design and analyze multi-stage and active filter circuits.
3 Class Hours, 3 Laboratory Hours
Prerequisite: EET 150 Electronic Devices

†EET 252 Electronic Systems & Laboratory **3,1 Credits**
A third course in Electronics that uses the circuit concepts used in EET 251 Electronic Circuitry to develop larger systems currently used in the electronics field. These include transducers, interface and data acquisition systems, switchmode power supplies, telecommunications, phase locked loops, television and communication systems. Emphasis on interface between the analog and digital world. Computer used throughout the semester to aid in design and debug of systems.
3 Class Hours, 3 Laboratory Hours
Prerequisite: EET 251 Electronic Circuitry

***‡EET 255 Electronics I** **4 Credits**
A first course in Electronics introducing the devices fundamental to the field. Introduction of semiconductor diodes, bipolar and field effect transistors, thyristors, op-amps. Design and analyze representation circuit based on these building blocks.
3 Class Hours, 2 Laboratory Hours
Prerequisite: EET 126 Circuits II

***TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS**
†These courses carry separate grades for lecture and laboratory
‡Combined lecture-laboratory courses; final grade depends on successful completion of both parts.

*‡EET 256 Electronics II — 4 Credits

A second course in Electronics that incorporates the devices introduced in EET 255 Electronics I into representative circuits of moderate complexity. These include multi-stage tuned amplifiers, op-amp active filters, and other related data acquisition circuits. Practical considerations including heat sinking, noise, electromagnetic interference, and appropriate device selection.

3 Class Hours, 2 Laboratory Hours

Prerequisite: EET 255 Electronics I and CST 122 Scientific Computer Programming - FORTRAN

*‡EET 257 Electronics III — 4 Credits

A third course in Electronics that uses the circuit concepts used in EET 256 Electronics II to develop larger systems currently used in the electronics field. These include switchmode power supplies, phase locked loops, communication systems, and interfacing systems. Computer used to aid in design and debug of systems.

3 Class Hours, 2 Laboratory Hours

Prerequisite: EET 256 Electronics II

†EET 267 Digital Electronics and Microprocessors I & Laboratory — 3,1 Credits

Study of number systems, logic gates (TTL/CMOS), counters, shift registers, codes, types of memories, Boolean algebra, reduction theorems, and black box design applied to data transmission, computer arithmetic, and microprocessor operations. Microprocessor (8080, 8085 and Z80) assembly language programming using assemblers, disassemblers, monitors, loaders, logic analyzers and other tools related to industrial applications of microcomputers. Internal operation of a computer from a block diagram approach. Applications include software scrolling, IC testing, traffic controllers, display systems, and math operations. Appropriate laboratory exercises provide hands-on experience in three areas - digital circuitry, microprocessor assembly language, and microprocessor interface hardware.

3 Class Hours, 2 Laboratory Hours

Prerequisite: EET 150 Electronic Devices or EET 255 Electronics I and CST 122 Scientific Computer Programming - FORTRAN or CST 141 FORTRAN Programming with Graphic Applications

*‡EET 268 Digital Electronics and Microprocessors II & Laboratory — 4 Credits

Use of modern microprocessors (Z80, 8086 and 68000) in real time control applications such as testing complex circuitry using microcomputers, display systems, speech synthesis, EPROM and EEPROM programming, ultrasonic techniques, data manipulation, multiplexing, video games, satellite receivers, encryption techniques, disk controllers , array processors, and other modern topics in the microcomputer world. Use of development systems (UNIX based), logic analyzers, and high level languages. Students undertake a project related to the field and study the differences between eight other popular microprocessors. Assembly language skills learned in EET 267 Digital Electronics and Microprocessors I are tuned and further software development takes place.

3 Class Hours, 2 Laboratory Hours

Prerequisite: EET 267 Digital Electronics and Microprocessors I and instructor approval

EET 299 Independent Study — 2-4 Credits

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a job-related assignment. Any independent study project is based on instructor availability.

Prerequisite: Department Approval

ENGINEERING

EGR 100, 200 Orientation — 0 Credits

Attendance at these sessions assures the Engineering Science student a smooth transition into and out of Broome Community College. Guest speakers discuss common problems engineering students encounter. Representatives from transfer schools introduce their respective institutions to students. Common exams will be scheduled during these sessions.

2 Class Hours

***TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS**

†These courses carry separate grades for lecture and laboratory

‡Combined lecture-laboratory courses; final grade depends on successful completion of both parts.

EGR 150 Engineering Graphics — 2 Credits

Fundamental course in drawing techniques and computer graphics, graphing, orthographic projections, dimensioning, true length, true size, relationships between lines and planes. BASIC programming is used to solve engineering applications in nomography, statistics, least squares regression and correlation coefficient. Computer file manipulation, word processing and spreadsheets are also covered. For Engineering Science Students.

1 Class Hour, 2 Laboratory Hours

Corequisite: EGR 100 Orientation and MAT 140 Trigonometry

EGR 151 Applications in Engineering — 3 Credits

Applications of computers to the solution of Engineering problems. FORTRAN on small systems and a mainframe, and commercial integrated programs will be used to solve problems involving curve fitting, zeros of functions. Monte Carlo method, infinite series, Gaussian elimination, chi-square statistics, electrical circuits, finite nodal analysis, engineering economics, and student T distributions. Writing Emphasis Course.

2 Class Hours, 2 Laboratory Hours

Prerequisite: EGR 150 Engineering Graphics

Corequisite: EGR 100 Orientation and MAT 181 Calculus I with Analytic Geometry

EGR 281 Mechanics (Statics) — 3 Credits

Fundamental concepts of the statics of rigid bodies developed by using a vector analysis approach. Force systems, centroids and centers of gravity, analysis of structures, shear and bending moments, friction and moments of inertia.

3 Class Hours

Prerequisite: 1 year of Calculus and PHY 181 Physics I

Corequisite: EGR 200 Orientation

EGR 282 Mechanics (Dynamics) — 3 Credits

Concepts using vector analysis approach to kinematics and kinetics of particles, systems of particles, kinematics and kinetics of rigid bodies. Forces, mass, acceleration, impulse, momentum, work and energy techniques, inertial tensor.

3 Class Hours

Prerequisite: EGR 281 Mechanics (Statics)

Corequisite: EGR 200 Orientation

EGR 283 Strength of Materials — 3 Credits

Topics to be covered are Normal, Shear and Bending Stress, Normal and Shear Strain, Stress-Strain Diagram. Torsion, Stress and Deformations in Pure Bending, Sheaar Stress in Transverse Loading, Mohr's Circle for Plane Stress, Design of Beams for strength, Deflection of Beams, Energy Methods, Columns.

3 Class Hours

Prerequisite: EGR 281 Mechanics (Statics)

Corequisite: EGR 200 Orientation

EGR 284 Materials Science — 3 Credits

Atomic model, bonding, lattice concept, crystal types, imperfections, stress and temperature effects, phase diagrams, alloys, ceramics, glass, concrete, polymers, corrosion.

3 Class Hours

Prerequisite: PHY 182 Engineering Physics II and CHM 146 Chemistry

Corequisite: EGR 200 Orientation

EGR 285 Electrical and Electronic Circuits — 3 Credits

Kirchoff's Laws, energy and power. Resistance, inductance and capacitance parameters. Series and parallel circuit's, superposition theorem, network analysis by mesh currents., nodal techniques, Thevenin's Theorem. Techniques for solving step response, pulse response, forced response, natural response and complete response. AC circuits, phasors, impedance, resonance. Operational amplifiers and feedback.

3 Class Hours

Prerequisite: 1 year of calculus and PHY 182 Engineering Physics II

Corequisite: EGR 200 Orientation

EGR 287 Engineering Science Laboratory I — 1 Credit

Experimentation in electrical and electronic circuits, heat, light, atomic and nuclear physics. Writing Emphasis Course.

3 Laboratory Hours

Prerequisite: 1 year of calculus and PHY 182 Engineering Physics II

Corequisite: EGR 285 Electrical and Electronic Circuits and PHY 281 Engineering Physics III

EGR 288 Engineering Science Laboratory II — 1 Credit

Experimentation in digital logic and microprocessors, software and hardware interfacing.

3 Laboratory Hours

Prerequisite: EGR 287 Engineering Science Laboratory I

Corerequisite: EGR 289 Introduction to Microprocessors

EGR 289 Introduction to Microprocessors — 2 Credits

Experimentation in digital logic and microprocessors, software and hardware interfacing. Emphasis on 6800, 8088, and 68000 series.
2 Laboratory Hours
Prerequisite: EGR 287 Engineering Lab I and EGR 285 Electrical Circuits
Corequisite: EGR 288 Engineering Science Laboratory II and EGR 200 Orientation

EGR 299 Independent Project — 2-4 Credits

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving work assignment.
Prerequisite: Department Approval

ENGLISH

After completing a writing sample, students with serious deficienceies will be required to enroll in ENG 090 Basic Language Skills or ENG 110S Written Expression I. Students generally begin a composition sequence with ENG 110 Written Expression I.

ENG 090 Basic Language Skills — 0 Credits

Writing workshops designed to improve a student's mastery of composition skills, including patterns of sentence structure and the recognition and correction of common errors in grammar and usage. (This course not applicable toward any degree.)
Minimum 4 Class Hours

ENG 106, 107, 108 English as a Second Language

See Page 101.

ENG 110 Written Expression — 3 Credits

Study and practice in the composition of ideas and information. Sentence and paragraph development, unity, coherence, style. Nature of language, including investigation of various aspects of communication to stimulate critical thinking.
3 Class Hours
Prerequisite: Placement test or ENG 090 Basic Language Skills

ENG 110S Written Expression — 3 Credits

Same as ENG 110 Written Expression I with one additional hour of supplemental help.
4 Class Hours

ENG 150 Technical Writing — 3 Credit

Principals and practice of writing in a technical environment. Emphasis on analysis and preparation of reports, articles, and technical correspondence. (This course is for students in Engineering Technology Programs).

ENG 163 Reporting — 3 Credits

An introduction to the basics of News Reporting for print journalism. Student newspaper used for workshop and actual publication.

ENG 163L Journalism Laboratory: Fulcrum — 1 Credit

Reporting, writing and editing the Fulcrum, the campus newspaper. Designed for editors and staff members of the Fulcrum.
3 Laboratory Hours (May be repeated for credit)

ENG 168 News Editing — 3 Credits

The basics of editing, headline writing, layout, and design for print journalism. Student publication used for hands-on experience.
3 Class Hours
Prerequisite: ENG 163 Reporting or ENG 110 or ENG 110S Written Expression I plus permission of instructor

ENG 170 Creative Writing — 3 Credits

Designed to provide students interested in imaginative writing with the opportunity to investigate concepts and to practice techniques implicit in prose, poetry and drama. Class discussion, workshops and personal conferences with the instructor.
3 Class Hours plus Workshop Hours

ENG 175 Creative Writing - Publication — 4 Credits

Designed to provide students interested in imaginative writing with the opportunity to investigate concepts and to practice techniques implicit in prose, poetry and drama. Class discussion, workshops and personal conferences with the instructor, writing, evaluating and arranging material for a campus literary journal.
3 Class Hours

ENG 210 Advanced Writing — 3 Credits

An intensive course in writing which extends the composing and critiquing skills of students who have mastered the basic skills of written expression. Emphasis on experimental techniques such as workshopping, peer tutoring, and word processing. Provides students with experience in collaborative techniques for improving their own writing and with techniques for tutoring beginning writers. Course requires peer tutoring in the writing center.
Prerequisite: English 110 or 110S Written Expression

ENG 220 Communicating About Values — 3 Credits

Critical analysis of issues and moral problems affecting all thinking adults. Selected readings organized around broad themes. Required writing assignments and oral communication. **Required of all degree students.**
Prerequisite: ENG 110 Written Expression

ENG 299 Independent Study: English — 3 Credits

An individual student project concerned with advanced work in a specific area of language or literature. Conducted under the direction of a faculty, independent study is concerned with material beyond the scope and depth of the ordinary course.
Prerequisite: One semester of college level work.

ENGLISH-AS-A-SECOND-LANGUAGE (ESL) COURSES

International students and residents of other nations may be admitted to the College if they meet special entrance requirements (see page 29). However, admission to the College does not guarantee admission into a particular degree program. All degree programs require English Language proficiency equivalent to ENG 106 for entry. Students who do not meet this requirement but satisfy other College admission requirements for foreign students are placed into a English-as-a Second-Language program (ESL) designed to bring their language competency up to a level appropriate for success at most American colleges and universities. Placement is determined after the student arrives on campus and depends on the special language exam administered by the English Department. For students entering at the lowest level of English proficiency, the following two semester program will be necessary. Students who enter at the ESL 103 or ESL 113 level will require more than two years to complete a degree. Students entering at the ENG 106 level or lower must take English courses in all subsequent semesters or until they have passed ENG 108.

Semester I (ESL 103 Series)

Course	Credits
ESL 103	5
ESL 104	4
ESL 105	4
SAC 110 (see p. 100)	2
Elective from regular currriculum	3
	18

Semester II (ESL 113 Series)

Course	Credits
ESL 113	4
ESL 114	4
ESL 115	4
Electives from regular curriculum	3-6
	15-18

The College does not normally admit students who require training below the ESL 103 level. However, it is prepared to offer ESL below this level if students are admitted in groups or 10 or more. Currently, ESL 003, 004 and 005 are being offered to a group of international students. Students may combine ESL 102 with the ESL 003 series or the ESL 103 Series to make up a 25 hour intensive language program.

ESL 003 English as a Second Language, Elementary Grammar — 4 Credits

Introduction of basic English grammar, both oral and written, for non-native speakers. Curriculum will include study of basic verb tenses, noun categories, and basic affirmative, negative, and interrogative sentence patterns. The materialwill reinforce what is taught in ESL 004 and 005. Taken together these courses are referred to as the ESL 003 Series. (This course is not acceptable for credits toward a degree).
4 Class Hours, 2 Laboratory Hours
Prerequisite: Diagnostic Test

ESL 004 English as a Second Language, Elementary Oral/Aural Skills — 4 Credits

A course for students who speak little or no English. The sounds of English are presented systematically and language laboratory practice is required. Ear training is begun and strengthened through work in the listening laboratory. Students are taught communicative skills from the outset, and the emphasis is on speaking and being understood. (This course is not acceptable for credit toward a degree).
4 Class Hours, 2 Laboratory Hours
Prerequisite: Diagnostic Test

ESL 005 English as a Second Language, Elementary Reading Skills — 4 Credits

For non-natives who had little exposure to written English. Basic sentence structure and vocabulary will be studied in order to improve student's comprehension, from simplified reading texts to those of increasing complexity. Writing skills, simple sentence structures, and organizational skills are also stresses. (This course is not acceptable for credits toward a degree).
4 Class Hours, 2 Laboratory Hours
Prerequisite: Diagnostic Test

ESL 102 English as a Second Language, Basic Writing Skills — 5 Credits

Introduction to the basic rhetorical/sentence patterns of English and their usage, organizational and developmental writing skills. Focus on the expression of ideas/concepts and their presentation in simple and complex sentence form, proof reading and editing skills, Note taking, outlining and Computer assisted instruction. (This course is not acceptable for credits toward a degree).
4 Class Hours, 3 Laboratory Hours
Prerequisite: Diagnostic Test

[Intensive English as a Second Language Program]
Students may combine ESL 102 with the ESL 003 series or the ESL 103 series to make up a 25 hour intensive language program]

ESL 103 English as a Second Language, Grammar Review — 5 Credits

Intensive review of pre-intermediate levels of the Elglish language for international students. Emphasis on listening, reading, speaking and some aspects or writing. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
4 Class Hours, 2 Laboratory Hours

ESL 104 English as a Second Language, Basic Speech — 4 Credits

To provide international students with practice, articulation and vocabulary needed to increase self-confidence in English conversation, discussion in the classroom and other daily situations. Audio-lingual laboratory. (This course is not acceptable toward a degree.)
3 Class Hours, 2 Laboratory Hours

ESL 105 English as a Second Language, Basic Reading — 4 Credits

Review of English sound-symbol correspondence, utilization of brief recombinations of variations of narratives and dialogues, and acquisition of simple reading techniques through exposure to uncomplicated reading selections. Vocabulary and reading comprehensive development, audio-lingual practice - active, passive, comparative. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours

ESL 113 English as a Second Language Intermediate Composition — 4 Credits

Study of the English language for international students with listening, reading, speaking, writing skills on the intermediate level. Language workshops emphasizing grammar, syntax, vocabulary and composition. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours
Prerequisite: ESL 103 English as a Second Langauge, Grammar Review or equivalent

ESL 114 English as a Second Language, Intermediate Speech — 4 Credits

Designed for international students emphasizing free and controlled conversation and discussion. Continues practice in articulation, phrasing and vocabulary building. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours
Prerequisite: ESL 104 English as a Second Language, Basic Speech or equivalent

ESL 115 English as a Second Language, Intermediate Reading — 4 Credits

Study of lexical, grammatical, and social-cultural meaning through intensive and extensive reading.Establishment of reading fluency and independence in English. Continues development of vocabulary and reading comprehension. Direct and audio-lingual practice with selected texts and exercises. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours
Prerequisite: ESL 105 English as a Second Language, Basic Speech or equivalent

Students who enter at the ESL 103 or ESL 113 level will require more than two years to complete a degree. For degree programs requiring six credit hours of English Composition, students may use ENG 107, 108, 110, or 220 depending on their degree program requirements and their English placement scores. Students placed in any ESL course are required to take English every semester until their English program requirements are met.

ENG 106 English as a Second Language, Intermediate II — 3 Credits

Advanced study of the English language for international students. Emphasis on the development of basic English compositional skills. Continued practice in listening, reading, and speaking.
3 Class Hours
Prerequisite: ESL 113 English as as Second Language, Series or equivalent

ENG 107 English as a Second Language, Advanced I — 3 Credits

Expanded study and practice in the composition of ideas and information for international students. Sentence and paragraph development, unity, coherence, style. Writing workshops for intensive practice in the formation of standard and idiomatic English. Investigation of the nature of language and various aspects of communication to stimulate critical thinking.
3 Class Hours (Equivalent to ENG 110 for foreign students)
Prerequisite: ENG 106 English as a Second Language, Intermediate II or equivalent

ENG 108 English as a Second Language, Advanced II — 3 Credits

Further study and practice in critical and evaluative thinking and writing for international students, based upon analysis and exposure to prose as well as major types of imaginative literature. Additional practice and familiarization with research procedures. Writing workshops and individual conferences to guide the international student through writing assignments.
3 Class Hours
Prerequisite: ENG 107 English as a second language, Advanced I

FIRE PROTECTION TECHNOLOGY

*FRS 101 Fire Prevention and Protection — 3 Credits

Methods, policies and procedures relative to establishing and operating appropriate fire prevention and protection programs. Writing Emphasis Course.
3 Class Hours

*FRS 103 Fire Fighting Tactics and Strategy — 3 Credits

Focus on pre-planning and the development of fire figthing tactics appropriate or a wide variety of hazards. Review of basic information and some local conditions. The case study method is used to develop plans and tactics relating to the student's own departments.
3 Class Hours

*FRS 105 Arson Investigation — 3 Credits

Fire investigations and arson. Responsibilities of the arson investigator, tools of the investigator, photography, electronic devices. laws pertaining to arson, motives and tools of the arsonist, courtroom procedures. A field experience will be included.
3 Class Hours

*FRS 107 Legal Aspects of the Fire Service — 3 Credits

Laws and regulations as they pertain to the fire service and its personnel. Legal terminology necessary for the interpretation of pertinent laws and decisions. Legal status of the fireman, as well as fireman's rights, duties and liabilities. Responsibilities and powers of the service in enforcement of ordinances and codes.
3 Class Hours

*FRS 108 Building Construction for Fire Science — 3 Credits

Fire fighters are confronted with many unknown factors at the fire ground. Among these is the unknown structural stability of the buildings they must enter. Basic principles of building construction and design with emphasis focused on fire protection concerns. Building materials included.
3 Class Hours

*FRS 200 Hazardous Materials — 3 Credits

Chemicals and chemical processes most closely involved in fire protection and fire fighting. Use, storage, transportation and disposal of hazardous materials with emphasis on flammable liquids, flammable solids, oxidizing materials, corrosive liquids, compressed gases.
3 Class Hours

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

***FRS 201 Fire Service Hydraulics** **3 Credits**
Application of the laws of mathematics and physics to properties of fluid states, force pressure and flow velocities. Emphasis in applying principles of hydraulics to fire-fighting problems.
3 Class Hours
Prerequisite: MAT 090B or equivalent.

***FRS 205 Fire Department Administration** **3 Credits**
Organization of the fire departments with emphasis on personnel management, distribution of equipment, maintenance of records, communications, data collection and community relations. ISO Grading Schedule.
3 Class Hours

***FRS 250 Special Topics** **1-3 Credits**
Exploration of special topics in Fire Protection Technology. May be repeated since topics will vary from semester to semester. Special Topics have included The Psychology of the Firesetter, Advanced Tactics and Strategy, and Protection and Detection Devices.

***FRS 299 Independent Study: Fire Service** **1-3 Credits**
An individual student project in an area of fire protection or service beyond the scope of regular courwork. Conducted under supervision of coordinator and approved by deparment chairperson.
Prerequisite: 6 Credits in FRS coursework and 6 Credits in General Education courses

FOREIGN LANGUAGES

The college offers regular classroom instruction in French, German, Italian, Russian and Spanish. In addition self-instructional language study for highly motivated and disciplined students is available as follows:

ARB 101S-102S	Beginning Arabic	4 Credits
CHN 101S-102S	Beginning Chinese	4 Credits
GRK 101S-102S	Beginning Modern Greek	4 Credits
HER 101S-102S	Beginning Hebrew	4 Credits
IRG 101S-102S	Beginning Irish-Garlic	4 Credits
JPN 101S-102S	Beginning Japanese	4 Credits
KOR 101S-102S	Beginning Korean	4 Credits
LTH 101S-102S	Beginning Lithuanian	4 Credits
POL 101S-102S	Beginning Polish	4 Credits
RUS 101S-102S	Beginning Russian	4 Credits
SWE 101S-102S	Beginning Swedish	4 Credits
WEL 101S-102S	Beginning Welsh-Garlic	4 Credits

(for more information see Page 19.)

FRENCH

PLACEMENT IN LANGUAGE - Generally one year of high school foreign language is equivalent to one semester in college. Students with two years of language in high school **should** register for intermediate level courses. **Students with three years of language in high school may not enroll in beginning courses.**

FRE 101, 102 Beginning French **4, 4 Credits**
Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Reading and discussion of graded literacy and cultural texts.
4 Class Hours
Prerequisite: FRE 101 Beginning French for FRE 102

***TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS**

FRE 201, 202 Intermediate French I and French II **3 Credits**
Intensive review of grammar and syntax and oral practice in classroom. Reading and discussion of works selected by the instructor.
3 Class Hours
Prerequisite: FRE 102 Beginning French for FRE 201

GEOGRAPHY

GEO 120 World Geography **3 Credits**
Description and analysis of variations in social, cultural, economic and political phenomena in major world areas. A regional approach is used to highlight the phenomena.
3 Class hours

GERMAN

GER 100 Practical German: 10 Minutes a Day **2 Credits**
Practical and simplified approach to speaking and understanding German. Emphasis on important and necessary aspects of everyday communication. Vocabulary and pronunciation acquisistion through use of instructor's expertise, flash cards, stickers, illustration, and sign recognition. (Does not satisfy language requirement.)
2 Class Hours

GER 101, 102 Beginning German **4, 4 Credits**
Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Written homework assignments supplemented by work in audio-lingual laboratory. Reading and discussion of graded literary and cultural texts.
4 Class Hours
Prerequisite: GER 101 Beginning German for GER 102

GER 201 German Conversation and Composition **3 Credits**
Emphasis on the four language skills - reading, writing, speaking, listening - especially on speaking and writing. Intensive discussion of style, grammar and the contemporary idiom to enhance the student's ability to express himself in German.
3 Class Hours, 1 Laboratory Hour
Prerequisite: GER 102 Beginning German

HEALTH SCIENCES

HSV 101 Cardiopulmonary Resuscitation **½ Credits**
Procedures necessary in administering CPR in emergency situations. American Heart Association method of teaching with certification. Performance of mastery level by demonstration and exam. For Health Science students. Will be given in 2-hour sessions to make a total of 8 hours.

HISTORY

HIS 115 Modern Global History is a core course required of all Liberal Arts students. Ordinarily it is a prerequisite for other history (HIS) courses. However, even where it is not a prerequisite, students are urged to complete this course before enrolling in any other history course.

HIS 100 The Rise of The West **3 Credits**
Introduction to both the study of history and the evolution of modern society, including its basic ideas, values and institutions, through an examination of Western Civilization. The Age of Transistion - the Renaissance, the Reformation, the Scientific Revolution, and the Enlightenment. The Industrial Transformation, appearance of modern constitutional and authoritarian government, major socio-political ideologies - liberalism, socialism, communism, nationalism, imperialism, fascism, totalitarianism. The intellectual crisis of the 20th Century, World Wars I and II. (Not offered in 1989-90.)
3 Class Hours

HIS 101-H Making of the Modern World I — 3 Credits

The evolution of modern society, from the Renaissance to the end of the nineteenth century. Introduction to the nature and study of history. Emergence of Western Civilization-Renaissance, Reformation, scientific, technological, economic, and social revolutions. Age of power-absolutism, parliamentary government, the Enlightment. Age of Revolution - American and French Revolutions, industrialization, modern political ideas, romantic and modern culture. Global Civilization - great discoveries, colonial empires modern imperialism. (For Honor Students)

3 Class Hours

HIS 102-H Making of the Modern World II — 3 Credits

A survey of the world in the 20th century, stressing the historical roots of contemporary societies. Origins and consequences of the First World War, the Russian Revolution and development of the USSR under Lenin and Stalin. Europe and the U.S. between the wars. Revolutions in science, views of man and society, art, music, and literature. Development and institutionalizing of fascism, origins and consequences of World War II. Impact on colonial empires in Asia and Africa, independence movements and revolutions. The contemporary scene. (For Honor Students)

3 Class Hours

HIS 115 Modern Global History: The World in Transition — 3 Credits

Historical Development of Western Civilization in the 19th-20th centuries, contrasted with selected non-Western societies. The key theme—the effects of modernity—is examined in several aspects: the regional nature of geography and demography; the important influences of traditional values and religious beliefs in the areas selected for study; the evolution of capitalism, socialism and communism, and nationalism and how these concepts affected less developed countries; the impact of industralization, colonialism, technology and science on the peoples of the contemporary world.

3 Class Hours

CIVILIZATION SURVEYS (HIS 130-161)

Liberal Arts students may select any one of the following courses to satisfy the remainder of the history requirement.

HIS 130 United States History I — 3 Credits

The United States from 1607 to 1898. The colonies, Revolution, Constitution, early national period, Age of Jackson, expansion, Civil War and Reconstruction, the West and the Gilded Age. Survey of political, economic, cultural developments through the 19th Century.

3 Class Hours

HIS 131 United States History II — 3 Credits

The United States from 1898 to the present. The American Empire, progressive reforms, World War I, the Twenties, Depression, New Deal, World War II and the Cold War, post-domestic issues.

3 Class Hours

HIS 141 History of Modern Latin America — 3 Credits

History of Latin America from the 1890's to the present, emphasizing the causes of political instability and economic backwardness. Close analyses of reform, reactionary and revolutionary movements in modern Latin America and of inter-American affairs.

3 Class Hours

SPECIAL TOPICS IN HISTORY (HIS 170-199)

HIS 170 The Future as History: A Look at the 21st Century United States — 3 Credits

Does the future have to be a shock? The objective of this course it to prove it does not have to be. Three or four possible courses which the next 100 years may take will be plotted, using knowledge of the economic, political nad social developments of the past 100 years of U.S. history and a basic understanding of the present day situation.

3 Class Hours

Prerequisite: HIS 130 United States History I or HIS 131 United States History II or POS 201 Introduction to American government.

HIS 175 Local History — 3 Credits

The early history of our local area including the late 18th Century Indian communities and the growth of 19th Century white settlements through development of industries and institutions from the days of the frontiersmen to the era of the railroaders and the factory hands. Historical methods of research. An historical walking tour of Binghamton, investigation of historical records on the premises of cooperative local institutions, and observation of contributions to local history.

3 Class Hours

HIS 180 Utopia: Visions of the Good Society — 3 Credits

Examines the functions of the Utopian Impulse throughout modern history as a series of "thought experiments" which address the question "what constitutes the Good Society?" Includes a comparative analysis of various representative utopias such as those of T. More, E. Ballamy, W. Morris, C.P. Gilman, H.G. Wells, B.F. Skinner, etc. Consideration will also be given to several representative anti-utopias/dystopias such as those of A.X. Huxley, G. Orwell, etc.

3 Class Hours

HIS 183 Herstory: Woman as a Historical Force — 3 Credits

A look at various ideologies about women compared to reality; varying attitudes toward women and where they originated; resulting roles assigned and contribution made by women in western civilization, with emphasis on the United States.

3 Class Hours

HIS 185 Hitler and The Nazi Dictatorship — 3 Credits

Origins of National Socialism, role of Adolf Hitler, road to Nazi Dictatorship, Nazi political and social revolutions. Hitler's foreign policy and Europe's reaction, World War II and Hitler's "New Order," Nazi system of persecution and genocide, collapse of the 1,000-year Reich, legacy of the Hitler period.

3 Class Hours

HIS 186 Modern American Social History — 3 Credits

Historical currents of social change and reform in the 20th Century. Reformist themes bearing on health, welfare, labor, women's suffrage, civil rights movement, and recent challenges to traditional American family structures and values, against the backdrop of hostile and supportive private groups. Creation of public institutions to meet human needs, such as Social Security. Response of the courts to organized reformist pressures. Contemporary trends.

3 Class Hours

HIS 190 The World Since 1945 — 3 Credits

An overview of the changing patterns in world affairs since the end of World War II. Emergence of the Third World War, The Cold War, responses to scientific/technological change, insurgent movements attempts at world organization/disarmament, the energy/ecology crisis, the various trouble spots like the Middle East, Panama Canal, Berlin, Asia. (Not offered in 1988-89)

3 Class Hours

Prerequisite: HIS 100 The Rise of the West or HIS 131 United States History II or HIS 115 Modern Global History

Short Modules (HIS 200-295)

The department offers special short modules of courses that carry one credit each. These deal with concentrated topics in history and are less than one semester in length.

HIS 299 Independent Study — 1-3 Credits

An independent student project which is beyond the scope of courses currently offered by the department, directed by a faculty member with approval of the department chairperson. Independent study does not satisfy the Liberal Arts requirement in history, and it may not be taken in lieu of a 100-series course.

Prerequisite: HIS 100 The Rise of the West or HIS 115 Modern Global History

HUMAN DEVELOPMENT COURSES

Across the nation students have indicated that they want the opportunity in college to identify, pursue and accomplish personal goals, to develop healthier self-concepts, to develop more effective levels of self-understanding and to become open human beings who can build trusting relationships with others. The student affairs course can be one means of facilitating humanistic objectives being espoused by "new" college students.

SAC 101 The Individual in a Changing Environment — 3 Credits

Individual interaction and reading designed to foster understanding and application of psychological and emotional growth within the many environments we are part of. Basic class material is the individual and group analysis of student's experience within an immediate unstructured setting. Focus on analysis and organization of experience into a personally rewarding conception of growth. Individual self-development projects outside the class.

3 Class Hours

SAC 110 Orientation for International Students — 2 Credits

An orientation course for international students designed to aid in their adjustment as students at Broome Community College. Study skills, academic regulations, the American educational system, individual educational and vocational goals, American customs. Especially intended for students during their initial semester of enrollment in conjunction with English-as-a-Second-Language course offerings, such as ESL 103, 104, 105. (This course is not acceptable for credits toward a degree.)

2 Class Hours

SAC 250 Career Exploration — 3 Credits

How to plan, establish, change a career. The process of deciding on a career and implementing career goals, assessment of values, interests and skills plus their relationship to occupations. Analysis of the labor market needs, identification of employers and sources of occupation information, the means of securing employment through proposals, resumes, applications and job interviews. Supportive small group atmosphere. Class activities include discussion, speakers, testing, and individual counseling within career development theory.

3 Class Hours

SAC 251 Career Search — 1 Credit

For people who know their interests, skills, and values but are not sure which career field or life styles would be most satisfying to them. Sources of occupational information, analysis of labor market needs, what colleges and college majors best prepare students for their career goals. For students who are beginning a career, changing careers, or returning to the job market. For students who scored 13-18 on My Vocational Situation. Supportive small group atmosphere. Discussion sessions, speakers, testing field work, and individual counseling.

2 Seminar Hours

SAC 295 Seminar in Human Potential — 3 Credits

Human potential seminar centers on the person within a positive group setting while working on and with the potential of all involved. It assists persons in achieving the following: becoming more self-direct, self-motivating, self-aware, self-controlled, self-disciplined and empathetic toward others. The focus is on developing the person's own resources by utilizing specific and structured procedures.

3 Class Hours

INTERIOR DESIGN

INT 101 History of Architecture - Exterior and Interior — 3 Credits

Survey of exterior and interior architectural styles from Ancient Egyptian through 20th Century

3 Class Hours

INT 105 Basic Drawing for Interior Design — 3 Credits

A course to provide design students drafting skills needed in the design of interiors.

1 Class Hour, 4 Laboratory Hours

INT 110 Interior Design I — 4 Credits

The studio interior design course requires the student to become well acquainted with the impact of the designed physical environment on individuals. Practical, aesthetic and psychological aspects of the built environment are addressed. Skills including conceptualizing in three dimensions, drawing in scale and presentation techniques both graphic and oral are developed. Contemporary aspects of design practice and America's influential architects, designers, journalists, and manufacturers will be investigated. Basic design elements will be applied to building design with emphasis on the interior and the relationship of the built environment to the natural.

2 Class Hours, 4 Studio Hours
Prerequisite: Introduction to Design
Recommended: INT 105 Basic Drawing for Interior Design and ART 101 History of Western Art

INT 111 Interior Design II — 4 Credits

To build and develop further the techniques acquired in Interior Design 110. Emphasis will be placed on conceptual analysis of space, aesthetic and functional. The student will be expected to work with the interior environment as a place that nurtures and sustains the human spirit. Sensitivity to the existing architecture of the building as well as awareness of the activities that must be accommodated will be essential in order to develop a workable and convincing solution to each project, residential and commercial.

2 Class Hours, 4 Studio Hours.
Prerequisite: INT 110 Interior Design I

INT 122 Professional Practice — 3 Credits

Study of processes, manufacture and installation of interior design products. Techniques used in writing specifications for interior design projects.

2 Class Hours, 2 Laboratory Hours

INT 140 Fabric Analysis — 2 Credits

History of textile forms and use, weaving techniques, pre-industrial and industrial as well as fiber properties, natural and man-made, are explored. Appropriate selection of textiles for interior use is stressed.

2 Class Hours

ITALIAN

PLACEMENT IN LANGUAGE - Generally one year of high school foreign language is equivalent to one semester in college. Students with two years of a language in high school should register for intermediate level courses. Students with three years may not enroll in ITA 101/102

ITA 101, 102 Beginning Italian — 4, 4 Credits

Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Reading and discussion of graded literary and cultural texts.

4 Class Hours
Prerequisite: ITA 101 Beginning Italian for ITA 102

ITA 201 Intermediate Italian I — 3 Credits

Comprehensive review of grammar and structure of the language. Intensive reading of literary works as a basis for topics of conversation in Italian in the classroom. Emphasis on aural comprehension and oral practice in classroom.

3 Class Hours
Prerequisite: ITA 102 Beginning Italian

ITA 202 Intermediate Italian II — 3 Credits

Intensive reading of literary works of recognized authors as a basis for topics of conversation in Italian in the classroom.

3 Class Hours
Prerequisite: ITA 201 Intermediate Italian I

ITA 299 Independent Study: Italian — 1-3 Credits

An individualized student project concerned with advanced work in specific area of Italian. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.

Prerequisite: 3 semester hours of college level work in Italian

LITERATURE

Students must complete ENG 110 before taking literature courses.

LIT 200 Introduction to Literature — 3 Credits

A survey of basic genres and themes in literature with introduction to literary analysis. Required of A.A. Students in Liberal Arts. This course is a prerequisite for all other literature courses.

3 Class Hours

LIT 210 Studies in United States Literature I — 3 Credits

History and development of United States literature from colonial period to late 19th Century. Emphasis on several major writers of the period.

3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 211 Studies in United States Literature II — 3 Credits

History and development of United States literature from late 19th Century to the present. Emphasis on several major writers of the period.

3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 214 Studies in British Literature I — 3 Credits

History and development of British literature from the Middle Ages to the 18th Century. Selections of literary merit from prose, drama, poetry.

3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 215 Studies in British Literature II — 3 Credits
History and development of British literature from the beginning of the 18th Century to the middle of the 20th.
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 220 The World of the Short Story — 3 Credits
An examination of the development of American, British and Continental short stories. Emphasis on theme and structure.
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 230 American Drama — 3 Credits
Studies in dramatic theories, techniques and thematic problems of the American drama. (Students taking this course may also be interested in THR 101 Fine Arts: Introduction to Theatre and THR 111 Acting).
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 233 World Drama — 3 Credits
Studies in dramatic theories, techniques and thematic relationships of the world drama. (Students taking this course may also be interested in THR 101 Fine Arts: Introduction to Theatre and THR 111 Acting.)
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 235 Tragic and Comic Vision of Shakespeare — 3 Credits
Shakespeare as both dramatist and poet. Emphasis on selected comedies, histories, tragedies.
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 240 The Poetic Experience: Sight and Sound — 3 Credits
An exploration of the different modes and moods of poetic expression. A thematic and structural approach to poetry as a total experience.
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 250 Portraits of Women — 3 Credits
An in-depth examination of what it means to be a woman as presented by representative literary artists, both women and men, in critically acclaimed pieces of literature. Emphasis on 19th and 20th Century material.
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 253 Psychological Investigation in Literature — 3 Credits
The application of Jungian, Fruedian and other psychological theories and insights to selected short stories, novels, and poems to promote more penetrating appreciation of character's motivations and actions and the literary work in general.
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 255 Modern Existential Literature — 3 Credits
An investigation of the themes of alienation and the absurd in selected prose and poetry to shed light on man's current existential crisis.
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 257 Heritage of Modern Literature — 3 Credits
An attempt to define modern literature as an embodiment and development of antique themes and traditions through the comparative study of the epic, the novel and related genre.
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 260 Detective Fiction — 3 Credits
A critical study of one of the most popular literary forms of our time, designed for armchair detectives. Starting with Poe, Conan Doyle (Sherlock Holmes) and other classics in the field, the course traces the development of the detective story from its puzzle-solving beginnings to the modern psychological novel of crime and detection.
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 263 Children's Literature — 3 Credits
Children's literature with introduction to the variety of books available today and development of standards for evaluating them. Prime concern is to help the student use the literature with children creatively, recognizing the importance of language arts, communication and listening skills in cognitive development.
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 265 Biblical Literature — 3 Credits
An acquisition of the skills necessary to study the Bible. Emphasis on the Biblical narrative and its relationship to Western culture through reading and analysis.
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 268 Fantasy and the Anti-Story — 3 Credits
An overview of two popular literary types: fantasy and anti-story. History of these types, with focus mainly on 20th Century development as the types have matured. Students read non-realistic fiction.
3 Class Hours
Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

MATHEMATICS

MAT 090 Basic Mathematics Review (Formerly MAT 003) — 0 Credits
Basic Mathematics Review is designed to give the student proficiency in elementary mathematics and provide a firm foundation for credit courses. It consists of three units allowing each department to select the units needed as prerequisites for its courses or programs.
3 Class Hours

A. Arithmetic and Introduction to Algebra
Arithmetic of whole numbers, fractions and decimals. Percent, measurement, metric units, ratio and proportion. Language of algebra, arithmetic of signed numbers, solving simple equations. Problem solving.

B. Elementary Algebra
Addition, subtraction, multiplication, division and simplification of algebraic expressions. Graphing. Solving linear equations and inequalities in two variables.
Prerequisite: Basic Mathematics Review A

C. Geometry and Introduction to Trigonometry
Properties and measurements of angles. Similar and congruent triangles, polygons and circles. Perimeter, area and volume measurements. Use of trigonometric ratios to solve right triangle problems.
Prerequisite: Basic Mathematics Review B

D. Metric Conversions and Dosage Computation
Common fractions and decimal fractions. Percentages, ratios and proportions.Metric computations. Apothecary systems. Apothecary, metric and household conversions. Calculation of dosages. Designed to meet the mathematics proficiency required for clinical nursing course.
Prerequisite: Basic Mathematics Review B

Basic Mathematics Review is typically available in both a traditional lecture format or as a self-paced course. Students in the self-paced course use audio-visual aids with a self-study manual, and they work individually with the instructor.

NOTE: MAT 090 has strict requirements, whereby students may be deregistered from the class for poor attendance. This deregistration may result in a loss of financial aid. Consult course outline and/or instructor for further details.

A complete sequence of Basic Math Review would begin with the first section of Arithmetic and Introduction to Algebra and end with the last section of Geometry and Introduction to Trigonometry. But few students study the entire sequence. In the self-study sections, the entry point in the sequence is determined by a placement test. The exit point is usually determined by the student's program requirements. All units are available in every scheduled section.
This course not applicable toward any degree.

MAT 104 Basic Technical Mathematics — 5 Credits*
Basic Arithmetic operations - Applied Geometry, basic Algebraic operations, Linear equations, graphing, factoring. Algebraic fractions, systems of linear equations, exponents and scientific notation, roots and radicals, quadratic equations. Trigonometric functions and graphs, solving right triangles, Laws of Sines, Law of Cosines. Designed to prepare technical students to enter MAT 139 Algebra, PHY 100 Preparatory Physics and CHM 102 Preparatory Chemistry.
5 Class Hours *(Credit applies only to a certificate program, credit does NOT apply to any degree program.)

MAT 113 Mathematics: A Liberal Art I — 3 Credits

An introduction to the variety and structural beauty of mathematics. Topics include: inductive and deductive reasoning, games and sequences, functions and their graphs, combinations, permutations, elementary probability, statistics, statistical graphs, misleading uses of statistics. Computer applications will support some of the topics. For Liberal Arts students: recommended for Fine Arts or Humanities majors; not for Science majors.

Prerequisite: MAT 090A Basic Mathematics Review or equivalent

MAT 114 Mathematics: A Liberal Art II — 3 Credits

An introduction to the variety and structural beauty of mathematics. Topics include: large numbers, exponents and logarithms, symmetry in two and three dimensional figures, mathematical curves in nature and science, networks, trees, topology and mathematics of finance. Computer applications will support some of the topics. For Liberal Arts students: recommended for Fine Art or Humanities majors; not for Science majors.

Prerequisite: MAT 090A Basic Mathematics Review or equivalent.

MAT 117 Elementary Finite Mathematics with Algebra — 4 Credits

Sets, probability, matrix algebra, graphing, inequalities, linear programming, permutations and combinations, linear models of equilibrium, systems of linear equations, solving equations and inequalities.(Student may not use both MAT 145 and MAT 117 to meet graduation requirements.)

4 Class Hours

Prerequisite: MAT 090B Basic Mathematics Review or equivalent

MAT 119 Modern Basic Mathematics I — 3 Credits

Algebra of propositions. Algebra of sets. Systems of numeration other than base ten. Properties of the operations of addition and multiplication for the sets of whole numbers integers and rational numbers. In troduction to number theory. For Liberal and General Studies Students; recommended for elementary education majors. (W-course)

3 Class Hours

Prerequisite: MAT 090B Basic Mathematics Review or equivalent

MAT 120 Modern Basic Mathematics II — 3 Credits

Real number systems, other mathematical systems. Informal geometry, congruence, measurement of areas and volumes, basic constructions. Coordinate geometry, lines, circles, equations. Inequalities and linear programming. Simple and conditional probability. Introduction to statistics. (W-course)

3 Class Hours

Prerequisite: MAT 119 Modern Basic Mathematics I or MAT 090C Basic Mathematics Review or equivalent

MAT 124 Statistics — 3 Credits

Descriptive statistics, organization and presentation of data, measures of central tendency. Variance, standard deviation, binomial distribution, statistical inference. Random sampling, hypothesis testing, confidence intervals, normal distribution, analysis of variance. Chi-square distribution, students t-distrubtion, correlation and regression. (Students may not use both MAT 124 and MAT 125 to meet graduation requirements.)

3 Class Hours

Prerequisite: MAT 090B Basic Mathematics Review, MAT 104 Basic Technical Math or equivalent

MAT 125 Statistics I Using Computers — 3 Credits

Introducing the computer language MINITAB to analyze descriptive statistics, organization and presentation of data, measures of central tendency, standard deviation, binomial distribution, statistical inference, random sampling, hypothesis testing, confidence intervals, normal distribution, Chi-square distribution, student's t-distribution, correlation and regression, Levey-Jennings and Youden Plots. (Students may not use both MAT 124 and MAT 125 to meet graduation requirements.)

3 Class Hours, 1 Laboratory Hour

Prerequisite: MAT 090B Basic Mathematics Review, MAT 104 Basic Technical Math or equivalent

MAT 139 Algebra — 4 Credits

Real and complex numbers, algebraic operations, functions and graphs, exponents and logarithms, linear and quadratic equations, systems of linear equations, linear inequalities, the binomial theorem, matrices and determinants.

4 Class Hours

Prerequisite: MAT 090B Basic Mathematics Review, MAT 104 Basic Technical Math or equivalent

MAT 140 Trigonometry — 4 Credits

Trigonometric functions and their graphs, solutions of triangles, trigonometric identities and equations, inverse trigonometric functions, position vectors, polar representation of complex numbers. DeMoivre's theorem.

4 Class Hours

Prerequisite: MAT 139 Algebra or equivalent

MAT 145 Finite Mathematics — 3 Credits

Boolean Logic, matrices, linear programming, simplex game theory, graphs, networks, application of networks and graphs. (Students may not use both MAT 145 and MAT 117 to meet graduation requirements.) (Formerly MAT 121).

3 Class Hours

Prerequisite: MAT 139 Algebra or equivalent

MAT 146 Introduction to Calculus — 3 Credits

Analytic geometry of line, circle and parabola. Functions and their graphs. Limits and continuity, differential - rules and applications, integration techniques and applications. Exponential and logarithmic functions and applications. Recommended for social science, health science and business students. Not for math majors or science majors in the A.S. degree program. (Formerly MAT 122).

3 Class Hours

Prerequisite: MAT 139 Algebra or equivalent

MAT 161 Pre-Calculus — 4 Credits

A review of algebra and trigonometry emphasizing computational skills. Algebraic operations, functions, graphs, exponents, logarithms, linear equations, inequalities, determinants. quadratic equations. Trigonometry, solutions of triangles, trigonometric graphs. Complex numbers and vectors. (Replaces MAT 141).

Prerequisite: Completion of a course in Algebra and Trigonometry or placement by advisor

MAT 162 Applied Calculus I — 4 Credits

Basic analytic geometry, distance, equations of lines. Limits, continuity and the derivative. Differentiation of polynomials, maxima and minima. Differentials and approximation, applications in kinematics and circuits. The definite integral and applications to finding area, center of gravity, volume of revolution, work done. Approximate integration, differentiating products and quotients, implicit differentiation and related rates, differentiation and integration of logarithmic, exponential, trigonometric and inverse trigonometric functions. (Formerly MAT 142).

4 Class Hours

Prerequisite: MAT 161 Pre-Calculus or equivalent

MAT 181 Calculus I with Analytic Geometry — 4 Credits

A university-parallel calculus course covering equations of lines, functions, limits and continuity. Differentiation of algrebraic and trigonometric functions with applications including curve sketching, rectilinear motion, related rates, maxima and minima. Summation, integration and the fundamental theorem of calculus. Applications of the definite integral including area, volume, arc length, surface area and work.

4 Class Hours

Prerequisite: MAT 161 Pre-Calculus Mathematics or equivalent

MAT 182 Calculus II with Analytic Geometry — 4 Credits

Differential and integration of logrithmic, exponential, hyperbolic functions, inverse trigonometric, inverse hyperbolic functions and parametric expressions. Techniques of integration including integration by parts, partial fractions and trigonometric substitution. Improper integrals, indeterminate forms and L'Hopitals rule, conic structure, rotation of axes. The Polar Coordinate System and its applications. Vectors in two and three dimensions. Unit tangents and normals. Lines in three space. Dot and cross product. Sequences, lines, test for convergence of a series.

4 Class Hours

Prerequisite: MAT 181 Calculus I with Analytic Geometry

MAT 250 Discrete Mathematics — 4 Credits

Sets, functions, proof techniques, relations, partially ordered sets, order isomorphisms, combinatorics including permutations, combinations, the pigeonhole principle, binomial and multinomial coefficients, recurrence relations, generation functions, the principles of inclusion-exclusion, graph theory including paths and connectedness, Eulerian and Hamiltonian graphs, graph isomorphisms, trees, binary search trees and Huffman codes, minimum spanning trees, directed graphs and networks and finite state machines.

4 Class Hours

Prerequisite: MAT 182 Calculus II with Analytic Geometry, PHI 202 Logic and ability to program in Fortran or Pascal is recommended.

MAT 252 Introduction to Numerical Analysis — 4 Credits

Computer techniques for the modeling and solutions of problems in numerical analysis. Error analysis, roots of equations, linear and non-linear systems of equations, calculus of finite differences, numerical integration, curve fitting, numerical solution of ordinary differential equations. The computer language Pascal is used.

4 Class Hours

Prerequisite: MAT 182 Calculus II with Analytic Geometry and ability to program in Pascal or Fortran

MAT 264 Linear Algebra — 4 Credits
Linear equations and matrices, real vector spaces, the algebra of linear transformations and matrices, determinants, eigenvalues and eigenvectors.
4 Class Hours
Prequisite: MAT 182 Calculus II with Analytic Geometry

MAT 266 Introduction to Higher Mathematics — 3 Credits
Exposure to basic mathematical methods and concepts. Sets, sequences, mapping, convergence. Preparation for analysis, topology and modern algebra. Recommended for Mathematics majors, Computer students and Engineering Science students, as advised.
Prerequisite or corequisite: MAT 281 Calculus III with Analytic Geometry or permission of instructor

MAT 281 Calculus III with Analytic Geometry — 4 Credits
Infinite series and covergence testing. Power series, radius of convergence. Conic sections and rotation of axis. Partial differentiation, directional derivatives, gradients, maxima and minima. Volume and other applications done by multiple integrals, line integrals. Introduction to first order differential equations.
4 Class Hours
Prerequisite: MAT 182 Calculus II with Analytic Geometry

MAT 282 Differential Equations with Linear Algebra — 4 Credits
First order differential equations. Matrices, determinants and solutions of systems of linear equations. Vector spaces, Wronskians, linear transformations and differential operations. Characteristic values and vectors, real symmetric matrices, functions of matrices. Homogenous and nonhomogeneous linear differential equations with constant coefficients, undetermined coefficients and variations of parameters. Matrix formulation of linear systems of differential equations and solution by characteristic values, the exponential matrix function, nonhomogeneous linear systems, LaPlace transforms and power series solutions.
4 Class Hours
Prerequisite: MAT 281 Calculus III with Analytic Geometry

MAT 299 Independent Study — 1-4 Credits
The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving work assignment.
Prerequisite: Department Chairperson Permission

MECHANICAL ENGINEERING TECHNOLOGY

MET 110 Introduction to Technologies — 1/2 Credit
Familiiarization with College policies and services, department policies and services, the curriculum and career/transfer possibilities. Development of basic technical skills including use of hand-held calculators and computers.
1 Class Hour

MET 113 Engineering Drawing I — 2 Credits
An introductory course in the fundamentals of engineering drawing. Topics include lettering, geometric construction, basic dimensioning, sectioning, auxiliary views, sketching & shape description.
1 Class Hours, 2 Laboratory Hours

MET 116 Engineering Drawing II with CAD — 2 Credits
A continued study in engineering drawing with an introduction to a CAD System. Selected topics to include assembly drawings, fits and tolerances, descriptive geometry along with an introduction to CAD.
1 Class Hours, 2 Laboratory Hours
Prerequisite: MET 113 Engineering Drawing I

MET 121 Manufacturing Processes I — 3 Credits
A basic study of manufacturing materials and processes, such as producing and processing ferrous and non-ferrous metals, metallurgy and heat treatment of steel, hot and cold working techniques, welding, and various casting processes. Laboratory exercises provide an opportunity for actual practice in the operation of selected manufacturing production equipment.
2 Class Hours, 2 Laboratory Hours

MET 122 Manufacturing Processes II — 2 Credits
A continuation of Manufacturing Processes I. Special topics to include screw thread systems and their measurement, Electrical Discharge Machining, Indexing, Gear terminology and Manufacturing Methods, Powder Metallurgy, N/C and C.N.C. Machining. Laboratory exercises parallel classroom topics and will provide the student with an opportunity to practice some of these manufacturing methods.
1 Class Hour, 3 Laboratory Hours
Prerequisite: MET 121 Manufacturing Processes I

MET 125 Programming Numerical Control Machine Tools — 2 Credits
Rectangular coordinate system, point to point and continuous path programming, reading and preparation of perforated tape and actual programming of certain numerical control equipment. Computer assisted programming and the relationship of group technology will be discussed.
2 Class Hours
Prerequisites: MAT 139 Algebra or equivalent and MET 122 Manufacturing Processes II or instructor's approval.

MET 132 Applied Mechanics — 4 Credits
STATICS: Free body diagram, trusses, friction, centroids, moments of inertia.

DYNAMICS: Motion of particles and bodies without consideration of the forces required to produce or maintain motion (Kinematics), unbalanced forces and the motion they produce (kinetics), work and energy, impulse and momentum.
4 Class Hours
Prerequisite: PHY 141 Physics and MAT 161 Precalculus or equivalent or department chairperson approval.

MET 223 Manufacturing Processes III — 2 Credits
Further experience with indexing, spiral work, cams, cylindrical grinding.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MET 122 Manufacturing Processes II

MET 235 Strength of Materials — 3 Credits
Normal and shear stress and strain, elastic and plastic deformation, torsion, stress in thin-walled cylinders, joints, shear force and bending moment in beams, beam stresses, beam deflection, multi-directional plane stress.
2 Class Hours, 3 Laboratory Hours
Prerequisite: MET 132 Applied Mechanics

MET 238 Mechanical Design — 4 Credits
An analysis of machine motion and the design of machine elements. Analysis of motion of linkages and mechanisms for displacement, velocity and acceleration relationships. Design and analysis of weldments, fasteners, springs, power screws, couplings, shafts, clutches, gears and bearings.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MET 235 Strength of Materials and CAD 200 Introduction to Computer Graphics or CAD 211 Basic Mechanical Design

MET 243 Fluid Mechanics — 3 Credits
The study of fluid statics and dynamics. Topics include fluid forces, flow measurement, the steady flow energy equation, viscosity, laminar and turbulent flow, frictional losses, pipeline systems, drag and lift, and open channel flow. Writing Emphasis Course.
2 Class Hours, 3 Laboratory Hours
Prerequisite: MET 132 Applied Mechanics

MET 244 Thermodynamics — 3 Credits
A study of the property and energy relationships in non-flow and steady flow applications. Topics include ideal gas relationships, real working substances, the first and second law of thermodynamics, thermodynamic cycles, and available energy. The cycle concept is applied to steam power, internal combustion engines, gas turbines, refrigeration and heat pumps. Consideration is also given to combustion analysis, nuclear energy and heat transfer.
2 Class Hours, 3 Laboratory Hours
Prerequisite: PHY 142 Physics II

MET 246 Refrigeration and Air Conditioning — 3 Credits
Energy transfer systems and controls used for cooling an environment below the temperature of its surroundings. Air and humidity calculations, heat transfer and transmission coefficients, heating loads, distribution systems, refrigeration systems, cooling load and air conditioning calculations, controls and control systems.
3 Class Hours
Prerequisite: MET 243 Fluid Mechanics
Corequisite: MET 244 Thermodynamics

MET 248 Fluid Power — 3 Credits
Static and dynamic fluid force systems used for both actuation and control of mechanical devices. Application of frequently used fluid power components and circuits.
3 Class Hours
Prerequisite: MET 243 Fluid Mechanics and MET 244 Thermodynamics

MET 252 Engineering Materials and Industrial Processes — 4 Credits

Properties, applications and processing of engineering materials including metallic, non-metallic and composite materials.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MET 121 Manufacturing Process I and MET 235 Strength of Materials

*MET 253 Engineering Materials and Industrial Processes — 3 Credits

Properties, applications and processing of engineering materials including metallic, non-metallic and composite materials.
2 Class Hours, 2 Laboratory Hours
Prerequisite: MET 121 Manufacturing Processes I and MET 235 Strength of Materials

MET 263 Engineering Statistics and Quality Control — 2 Credits

Introduces measures of the central tendency and dispersion of data. Relates the theories of statistics and probability to the industrial techniques of control charting and acceptance sampling. Emphasizes the concepts of accuracy, precision, and repeatability in engineering measurement. Topics include normal, hypergeometric, binomial, and Poisson distributions; control charts for mean, range, fraction defective, etc.;single, multiple, and continuous sampling; reliability; specifications, tolerances, and measurement.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MAT 161 Precalculus, or MAT 139 Algebra

*MET 280 Management Decisions — 2 Credits

Objective criteria and evaluation in making decisions. Currently accepted procedures to conceive management models and systems.
2 Class Hours

*MET 285 Time, Motion and Wage Study — 2 Credits

Analysis of time spent and methods used for industrial tasks. Relations to wage structure on individual and plant-wide basis.
2 Class Hours
Prerequisite: MAT 139 Algebra

*MET 286 Production Control — 2 Credits

Planning, scheduling and routing of goods through a plant from raw materials to finished products. Production control principles, the control of manufacturing processes.
2 Class Hours
Prerequisite: MAT 139 Algebra

*MET 287 Plant Layout and Materials Handling — 2 Credits

Plant arrrangement as it influences industrial operations. Assembling data, coordinating operations, developing operational layouts, evaluative arrangements. Materials handling requirements, planning and evaluation.
2 Class Hours
Prerequisite: MAT 139 Algebra

MET 295 Seminar — 1-3 Credits

An opportunity for the interested student to become involved with the process of research, formal paper preparation, formal delivery and defense of ideas presented. Also a critical evaluation of ideas set forth by others.
Prerequisite: As established by the Department Chairperson

MET 299 Independent Study — 2-4 Credits

The student undertakes an independent project in his specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a work assignment.
Prerequisite: Approval of Department Chairperson

MEDICAL ASSISTANT

MDA 102 Medical Assisting Science — 2 Credits

Introduction to the profession of medical assisting. Qualifications and duties, professional affiliation, history of medicine, ethics and professionalism, the role of the medical assistant in the physician's office. Interactions with patients and staff.
2 Class Hours

MDA 104 Keyboarding and Medical Word Processing — 3 Credits

Introduction to and development of basic keyboarding skills on typewriters and computer keyboards and introduction to word processing. Students will have the opportunity to learn keyboarding and word processing functions and apply that knowledge with hands-on development of skills. Emphasis will be on application to medical correspondence, reports, and chart notes. For Health Science students only.
2 Class Hours, 3 Laboratory Hours
Prerequisite: BIO 131 Human Biology and and MRT 105 taken concurrently or consent of instructor

MDA 106 Medical Correspondence and Communications — 2 Credits

Development of correspondence and communication skills. Fundamentals of machine-dictated and written medical reports and correspondence. Patient related communications, such as reception and telephone techniques, message taking and patient information skills. For Medical Assisting students.
2 Laboratory Hours
Prerequisites: MRT 105 Medical Terminology I and MDA 104 Keyboarding and Medical Word Processing or consent of instructor

MDA 114 Standard First Aid Management of Emergencies — 1 Credit

The causes, care and prevention of accident/emergency life-saving situations. Mastery level of learning for the proficiency of basic skills. Certification by National Safety Council. Recognizing, managing and aiding the physician in medical emergencies and maintaining emergency supplies. Professional observer with EMT.
2 Laboratory Hours

MDA 115 Medical Assisting Procedures I — 4 Credits

Basic clinical procedures of medical assisting in the physicians' office. Use and management of diagnostic instruments and equipment. Related patient care, professional ethics, medical terminology nomenclature. For Medical Assisting students.
3 Class Hours, 2 Laboratory Hours
Prerequisite: MRT 105 Medical Terminology or consent of instructor

MDA 201 Medical Assisting Procedures III — 4 Credits

Introduction to basic microbiology, hematology and urinalysis. Collection, preparation and testing of blood, urine and body fluids. Significance of laboratory analysis. For Medical Assisting students.
2 Class Hours, 4 Laboratory Hours
Prerequisite: BIO 132 Human Biology II

MDA 206 Medical Office Management — 4 Credits

Medical office administrative procedures, such as bookkeeping principles and practices, patient health records, insurance forms, banking and postal services, payroll records, patient accounts, office machines. Mechanics of applicable medical correspondence. Appointment scheduling, supplies and inventory. Emphasis on practical application of administrative techniques. For Medical Assisting students.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MDA 102 Medical Assisting Science and MDA 106 Medical Correspondence and Communications

MDA 208 Medical Ethics, Law and Economics — 3 Credits

Emphasizing the medical ethics which set the standards of conduct for physicians, as well as guidelines for medical assistants. Requirements to practice medicine, legal liabilities of the profession, and the importance of medicolegal consent forms. Legal arrangements of private medical practices, medical care financing, and systems of health care delivery.
3 Class Hours

MDA 210 Pharmacology — 2 Credits

A practical course relevant to health science courses. Emphasizes knowledge of prescriptions and prescription writing. Basic principles of mathematics in pharmacy. Drugs governed by U.S.P. standards which are in common use and the generic-pharmaceutical relationship. Drug grouping action in relation to human physiology. For Health Science students.
2 Class Hours
Prerequisite: BIO 132 Human Biology II or consent of instructor

MDA 211 Medical Assisting Procedures II — 4 Credits

Advanced technical procedures in medical assisting specifically oriented to the various medical specialties. Techniques of electrocardiography, audiometry and physical therapy. Field trips and practical experiences give additional background outside of the classroom. For Medical Assisting students. (It is strongly recommended that this course be taken the semester prior to MDA 245 Directed Practice.)
2 Class Hours, 4 Laboratory Hours
Prerequisite: BIO 132 Human Biology II and MDA 115 Medical Assisting Procedures I

MDA 245 Directed Practice — 5 Credits

Directed practical experience as an extern in physician's offices, medical centers, school health departments, rehabilitation clinics, and other health care facilities, weekly seminar. For senior Medical Assisting students who must have a 2.0 overall average.

1 Class Hour, 16 Laboratory Hours

Prerequisite: MDA 206 Medical Office Management and MDA 211 Medical Assisting Procedures II. MDA 201 Medical Assisting Procedures III and MDA 210 Pharmacology must be taken previously or concurrently.

MEDICAL LABORATORY TECHNOLOGY

MLT 110 Introduction to Medical Laboratory Technology — 1 Credit

Overview of the field of Medical Technology. Designed to acquaint the student with six areas of a clinical laboratory and with the professional role of the technologist/technician in that setting. Discussions will include the variety of opportunities open to those entering the field.

1 Class Hour

MLT 201 Hematology and Coagulation — 3 Credits

Comprehensive study of the hemopoietic and hemostatic systems. The normal physiology and classic pathology of both systems. Emphasis is on the mechanics and interpretation of routine and special test procedures.

3 Weeks: 2 Class Hours, 4 Laboratory Hours per day

Prerequisite: Freshman Year in Medical Laboratory Technology or approval of MLT advisor

MLT 201P Hematology and Coagulation Practicum — 3 Credits

Clinical experience in the hematology laboratory of an affiliated hospital. Designed for observation and development of technical skills needed to perform in a hematology/coagulation laboratory.

3 Weeks: 30 Hours per week of practicum

Prerequisite: MLT 201 Hematology and Coagulation

MLT 202 Urinalysis/Body Fluids — 1 Credit

Study of the physiologic processes which result in the formation of urine and body fluids. Emphasis on analysis of fluids and interpretation of test results.

1 Week: 2 Class Hours, 4 Laboratory Hours per day

Prerequisite: Freshmen Year of Medical Laboratory Technology or permission of MLT advisor.

MLT 202P Urinalysis/Body Fluids Practicum — 1 Credit

Clinical experience in the Urinalysis/Body Fluid area of an affiliated hospital. Designed to give students experience and competence in performing standard laboratory techniques.

1 Week: 40 Hours of Practicum

Prerequisite: MLT 202 Urinalysis/Body Fluids

MLT 203 Microbiology — 6 Credits

Survey of the microbial world, from taxonomy, morphology, and structure to metabolism, genetics, and growth characteristics of microbes. Emphasis in the latter part of course on the isolation and identification of medically important microbes.

5 Weeks: 3 Class Hours, 3 Laboratory Hours per day

Prerequisite: Freshman Year Medical Laboratory Technology or permission of MLT advisor

MLT 203P Microbiology Practicum — 2 Credits

Clinical experience in the Microbiology area of an affiliated hospital. Students gain competence in diagnostic techniques used in the growth and identification of medically important microbes.

2 Weeks: 40 Hours per week

Prerequisite: MLT 203 Microbiology

MLT 204 Phlebotomy — 1 Credit

Training and experience in the practice of phlebotomy, teaching students to recognize and use blood collection equipment, isolation techniques and precautions, and perform procedures of routine venipuncture and skin puncture. Practical experience at affiliated hospitals.

8 Class Hours, 30 Practicum Hours

MLT 205 Immunology — 4 Credits

Study of mechanisms of immune response, including discussions of humoral and cell-mediated immunity, complement, phagocytosis, and the interaction of all systems. Immunodeficiency, autoimmunity, immune proliferation and immunopathology examined in relation and contrast to normal immune function. Laboratory sessions emphasize testing to determine immune status and diagnose disease.

3 Weeks: 2 Class Hours, 4 Laboratory Hours per day, to include simulated experience.

Prerequisite: Freshmen Year of Medical Laboratory Technology or permission of MLT advisor

MLT 206 Immunohematology — 2 Credits

Introduction to the field of blood banking. Theoretical knowledge of blood groups and blood grouping. component and transfusion therapies, transfusion reactions, and allo- and autoantibody formation. In laboratory sessions the student performs ABO and Rh grouping, antibody identification, and compatibility testing.

2 Weeks: 2 Class Hours, 4 Laboratory Hours per day

Prerequisite: Freshman Year in Medical Laboratory Technology or permission of MLT advisor

MLT 206P Immunohematology Practicum — 2 Credits

Experience in the Blood Bank of an affiliated hospital. Students perform routine blood bank procedures.

2 Weeks: 35 Hours per week

Prerequisite: MLT 206 Immunohematology

MLT 207 Clinical Chemistry — 5 Credits

Designed to cover the principles and analytical methods of clinical chemistry as performed in the medical laboratory. The relationship of physiochemical measurements of body function in health and disease including the renal, liver, digestive and respiratory systems. Emphasis on those chemical tests which evaluate the function of these systems related to metabolism, protein synthesis, pH, blood gases, electrolyte balance, enzymes and hormones. Laboratory work includes the theory, operation and maintenance of the specialized and semi- and fully automated analytical instrumentation used to perform these chemical tests.

5 Weeks: 2 Class Hours, 4 Laboratory Hours per day

Prerequisite: Freshmen Year in Medical Laboratory Technology or permission of MLT advisor

MLT 207P Clinical Chemistry Practicum — 3 Credits

Clinical experience in the Chemistry and Special Chemistry areas of an affiliated hospital. Students practice methods learned in MLT 207 Clinical Chemistry to expand their technical skills into a broader range of equipment and more advanced instrumentation

3 Weeks: 35 Hours per week.

Prerequisite: MLT 207 Clinical Chemistry

MLT 299 Independent Study — 1-4 Credits

Course content covering advanced work in Medical Laboratory Technology on which the instructor and student agree. The material is beyond the scope of an ordinary course and it must be approved by the department chairperson. Conducted under the direction of a faculty member.

Prerequisite: Department Approval

MEDICAL RECORD TECHNOLOGY

MRT 101 Medical Record Science I — 2 Credits

Functions of a medical record department and overview of the professional association. Definition of, standards for, and development of a medical record as to content, format, evaluation and completion. A comprehensive review of the organization of the medical staff. Numbering and filing systems and methods. Overview of accrediting agencies for health care facilities.

2 Class Hours

Corequisite: MRT 101L Medical Record Science I Laboratory

MRT 101L Medical Record Science Laboratory — 1 Credit

Practical application in the medical record laboratory of the principles described in the lecture mode of this course.

2 Laboratory Hours

Corequisite: MRT 101 Medical Record Science I

MRT 105 Medical Terminology I — 2 Credits

Medical terminology as correlated with anatomical systems. Suffixes, pefixes, root workds and use of the medical dictionaries. For Medical Assistant students.

2 Class Hours

MRT 106 Medical Terminology — 4 Credits
A study of the language of medicine, including suffixes, prefixes and root words. Emphasis on terminology associated with the anatomic systems. For Medical Record Technology students.
4 Class Hours

MRT 107 Medical Transcription — 3 Credits
Orientation to typewriting techniques and skills as well as basic word processing techniques utilizing the IBM-PC. Introduction to various medical reports, format and basic medical transcription.
2 Class Hours, 2 Laboratory Hours
Prerequisite: MRT 105/106 Medical Terminology

MRT 110 Medical Record Science II — 3 Credits
A study of the purpose of classifying diseases and operations. In-depth study of nomenclature/classification systems, such as ICD-9-CM, CPT-4, DSM-III and ICD-O. Introduction to the prospective payment system utilizing DRGs.
3 Class Hours
Prerequisite: MRT 101 Medical Record Science I
Corequisite: MRT 110L Medical Record Science II Laboratory.

MRT 110L Medical Record Science II Laboratory — 1 Credit
Actual practice of coding medical records utilizing various classification systems, and assignments of DRGs.
2 Laboratory Hours
Corequisite: MRT 110 Medical Record Science II

MRT 115 Medical Terminology II — 2 Credits
A continuation of MRT 105 Medical Terminology I. Emphasis on terminology associated with the integumentary, musculoskeletal, nervous, special senses, cardiovascular, digestive, respiratory, genito-urinary and endocrine systems.
2 Class Hours
Prerequisite: MRT 105 Medical Terminology I

MRT 144 Directed Practice — 4 Credits
Directed summer practical experience in the hospital medical record department. Development of insight and skills into the basic medical record procedures. Graduation requirement.
40 Laboratory Hours per week for 4 Weeks
Prerequisite: MRT 110 Medical Record Science

MRT 202 Medical Record Science III — 3 Credits
A study of medical record department indexes, registers, and data abstracting and retrieval methods. In-depth treatment of basic hospital and vital statistics. Data display and report generation.
3 Class Hours
Prerequisite: MRT 110 Medical Record Science II and BIO 132 Human Biology or permission of instructor.
Corequisite: MRT 202L Medical Record Science III Laboratory and BIO 140 Pathophysiology.

MRT 202L Medical Record Science III Laboratory — 1 Credit
Applications of the principles learned in the lecture mode of this course.
2 Laboratory Hours
Corequisite: MRT 202 Medical Record Science III

MRT 208 Advanced Medical Transcription — 2 Credits
Review of medical terminology emphasizing specialized terminology. Advanced medical transcription techniques through the use of recorded history and physical examinations, discharge summaries, consultation reports, operative reports and outpatient notes.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MRT 107 Medical Transcription

MRT 210 Medical Record Science IV — 2 Credits
Principles of management and the role of the supervisor in the medical record department. Developmental and operational phase of health information systems. Trends in health care delivery systems. Overview of ambulatory care, long term care and psychiatric facilities. Introduction to problem Oriented Medical Record System.
2 Class Hours
Prerequisite: MRT 202 Medical Record Science III and MRT 202L Medical Record Science II Laboratory
Corequisite: MRT 210L Medical Record Science IV Laboratory

MRT 210L Medical Record Science IV Laboratory — 1 Credit
Practical application of the principles described in the lecture mode of this course.
2 Laboratory Hours
Prerequisite: MRT 110 Medical Record Science II and MRT 144 Directed Practice

MRT 216 Clinical Practicum — 1 Credit
Enables the students to utilize the knowledge and skills obtained in the classroom and directed practice assignments. Students perform the functions of an actual medical record department and use the computer assignments. Students perform the functions of an actual medical record department and use the computer terminal, microfilm equipment and medical transcription word processing center.
2 Laboratory Hours
Prerequisite: MRT 110 Medical Record Science and MRT 144 Directed Practice

MRT 222 Medical Legal Aspects — 3 Credits
Introduction to legal aspects of medical records. Legal basis for medical practice, confidentiality. Patient's "Bill of Rights," voluntary and involuntary release of medical information. Authorizations and consents, professional liabilities, medical-moral issues such as abortion, euthanasia, sterilization, artificial insemination.
3 Class Hours
Prerequisite: MRT 202 Medical Record Science

MRT 236 Quality Assurance — 2 Credits
A study of the components of a quality assurance program—quality assessment, utilization management, and risk management.
1 Class Hour, 2 Laboratory Hours
Prerequisite: MRT 110 Medical Record Science

MRT 245 Directed Practice — 6 Credits
Directed practice experience in the hospital and related sites. Correlated with MRT 210 Medical Record Science to develop insight and skills into advanced medical record procedures.
6 Weeks: 40 Hours per week
Prerequisite: MRT 202 Medical Record Science and MRT 144 Directed Practice

MRT 295 Medical Record Seminar — 2 Credits
Detailed study and analysis of specific problems encountered in the administration of a medical record department. Correlated with directed clinical practice. Case study and extensive literature review.
2 Class Hours

MUSIC

MUS 101 Introduction to Music — 3 Credits
A survey course examining the music of the great composers representing each major period of Music History. How to listen to different forms of music such as symphonies, concertos, opera and jazz will be included in the topics covered. Emphasis on developing listening skills to bring the student to an informed awareness and understanding of great music.
3 Class Hours

MUS 105 Music Theory I — 3 Credits
A beginning course in music theory, including basic rudiments of music. Pitch and rhythmic notation, scales and intervals. Ear training through melodic and rhythmic drills and dictation.
3 Class Hours

MUS 106 Music Theory II — 3 Credits
Continuation of Music Theory I. Traditional harmony, exercises in melodic, rhythmic and harmonic dictation, aural analysis, beginning composition.
3 Class Hours
Prerequisite: MUS 105 Music Theory I or consent of instructor

MUS 112 20th Century Music — 3 Credits
Important musicians and musical styles of the 20th Century. Emphasis on the trends and development of music in America. Leading European composers.
3 Class Hours
Prerequisite: MUS 101 Introduction to Music or consent of instructor

MUS 114 History of Opera — 3 Credits
A survey of the various styles of opera from the 17th through the 20th centuries. Emphasis on the works of master composers — Monteverdi, Mozart, Verdi and Wagner; impact of opera on music history; social and cultural contents of opera.
3 Class Hours
Prerequisite: MUS 101 or permission of instructor

MUS 180 Jazz Improvisation — 2 Credits
Basic concepts of soloing in the jazz idiom for instrumentalists. Teach students to interpret chord symbols and understand the sounds that they represent in a meaningful way to create a jazz solo with their instrument. Attendance at jazz concerts required.
1 Class Hour, 3 Studio Hours
Prerequisite: MUS 105 Music Theory I or permission of instructor
May be repeated for credit once.

MUS 185 Beginning Guitar — 1 Credit
Emphasis on Music Fundamentals, scales, chords, reading rhythms and learning to accompany singers. Students must own their own instruments.
2 Studio Hours

MUS 186 Guitar Ensemble — 1 Credit
Provide students the opportunity to perform music for the guitar in a group setting. Emphasis will be on group and individual playing. The music played will be chosen with respect to the historical literature available.
2 Studio Hours
May be repeated for credit 3 times.

MUS 187 The Guitar: Its History and Music — 3 Credits
The development of the physical and musical history of the instrument is presented through live performances and recordings. The history of the guitar and its importance relative to composers and performers throughout music history will be identified.
3 Class Hours

MUS 188 Practical Music Theory for the Performing Musician — 3 Credits
Designed to help the novice performer of music understand key signatures, scales, rhythms, chords, form intervals, transposition, notation and sight reading. Emphasis on fundamentals of music and practical application of what is learned.
3 Class Hours

MUS 190 The College Choir — 1 Credit
Students who sing in the College Choir receive one credit per semester. See page 33.
3 Studio Hours

MUS 191 Music Performance — 1 Credit
Students who participate in the recitals or concerts of the academically-associated Broome Community College Music Performance groups receive one credit per semester.
May be repeated 3 times for credit.

MUS 192 Woodwind Ensemble — 1 Credit
May be repeated 3 times

MUS 193 Brass Ensemble — 1 Credit
May be repeated 3 times

MUS 194 Voice Class I — 1 Credit
Provides any student the opportunity to learn correct vocal production, breath control, diction, articulation and musical interpretation of art songs. Emphasis is on tonal production and group and individual singing.
2 Studio Hours

MUS 195 Jazz Ensemble — 1 Credit
By audition only.
May be repeated 3 times.

MUS 196 String Ensemble — 1 Credit
(Not for guitarist).
May be repeated 3 times.

MUS 197 Applied Music I — 1 Credit
For students in their first semester. To enable instrumental and vocal students to study privately with a teacher and develop their musical performance abilities. Not a course for beginners. A minimum of 15 lessons required per semester. Cost of lessons not included in BCC tuition.
2 Studio Hours

MUS 198 Applied Music II — 1 Credit
Continuation of MUS 197 Applied Music I, for second semester students. A minimum of 15 lessons required per semester and continued musical growth and maturity in solo and ensemble performance is expected. Cost of lessons not included in BCC tuition.
2 Studio Hours
Prerequisite: MUS 197 Applied Music I

MUS 199 Intermediate Guitar — 1 Credit
Continuation of beginning guitar. Emphasis on picking techniques, fingerings, chords, music reading and performance. There will also be a greater emphasis on technique.
2 Studio Hours

MUS 294 Voice Class II — 1 Credit
Continuation of Voice Class I and for students who have performed in high school musicals, chorus and/or those who have studied privately. This is a group situation in which vocal literature appropriate to individual and group singing will be sung.
2 Studio Hours
Prerequisite: MUS 194 Voice Class I or permission of instructor

MUS 297 Applied Music III — 1 Credit
Continuation of MUS 198 Applied Music II, for third semester students.
2 Studio Hours
Prerequisite: MUS 198 Applied Music II

MUS 298 Applied Music IV — 1 Credit
Continuation of MUS 297 Applied Music III, for fourth semester students.
2 Studio Hours
Prerequisite: MUS 297 Applied Music III

MUS 299 Independent Study: Music — 1-3 Credits
An individual student project concerned with advanced work in a specific area of music. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.
Prerequisite: 3 semester hours of college level work in music.

NURSING

ADN 100 Meeting Basic Human Needs — 4 Credits
In Basic Human Needs, the student is introduced to the conceptual framework upon which the curriculum is designed. The needs approach, based on Maslow's Hierarchy of Human Needs, is emphasized. This is the basis for applying the nursing process to the delivery of patient care within the adult life cycle. Biopsychosocial concepts are used to present the holistic human within varied cultures. Emphasis is placed on the maintenance of homeostasis based on the wellness/illness continuum. The student is introduced to the basic concepts of pharmacology. Class content and skills learned in nursing skills laboratory are applied during clinical laboratory experiences. ADN 100C runs concurrently with lecture component and successful achievement is required.
4 Class Hours

ADN 100C Meeting Basic Human Needs — 2 Credits
Clinical Component. S/U Grade given.
6 Clinical Hours

ADN 102 Meeting Mobility Needs — 3 Credits
This course focuses on the concepts of immobility, incorporating the nursing process. Maslow's Hierarchy of Needs and the life cycle. Neurologic, orthopedic and sensory dysfunctions are explored. Perioperative concepts including the psychophysiologic aspects of pain are included. Stages of illness and the physiology of disturbances of body temperature are presented. Autoimmune diseases and their nursing implications are explored. The nursing process is used to correlate class theory, nursing skills and clinical skills. This course builds on the student's prior knowledge of anatomy and physiolgy. ADN 102C runs concurrently with lecture component and successful achievement is required.
3 Class Hours
Prerequisites: ADN 100 Meeting Basic Human Needs and BIO 131 Human Biology I

ADN 102C Meeting Mobility Needs — 2 Credits
Clinical Component. S/U Grade given.
6 Clinical Hours

ADN 103 Nursing Issues I — 1 Credit
Nursing Issues is designed to explore, in detail, critical thinking, analytical writing, decision making, values clarification and the setting of priorities within the context of ethical, legal and cultural influences impacting on self and the practice of nursing. Assertiveness and management skills will be explored and applied to nursing practice situations. Emphasis will be on personal accountability and the management of multiple patient care situations. Writing Emphasis Course.
2 Seminar Hours
Prerequisite: ADN 100 Meeting Basic Human Needs

ADN 204 Regulatory Concepts — 3 Credits
This course focuses on the nursing process and Maslow's Hierarchy of Needs across the life cycle. Stress, both physical and non-physical is discussed as how it affects and is effected by human physiology and pathology.

Mechanisms of normal fluid and electrolyte control are presented. The more common disturbances of body fluid and electrolytes are explored as a means of applying the nursing concepts of prevention of client problems, maintenance of existing client strengths and restoration of clients to an optimum level of health. Endocrine function is reviewed and the effects of dysfunction are presented. The nursing process is used to correlate class theory, nursing skills, and clinical skills. This course builds on the student's prior knowledge of anatomy and physiology. ADN 204C runs concurrently with lecture component and successful achievement is required.
3 Class Hours
Prerequisites: ADN 102 Meeting Mobility Needs, BIO 132 Human Biology II and Developmental Psych.

ADN 204 Regulatory Concepts — 1 1/2 Credits
Clinical Component. S/U Grade given.
4½ Hours Campus Lab

ADN 205 Psychological Concepts I — 3 Credits
This course will focus on mental health concepts, providing a therapeutic environment and applying the nursing process using Maslow's Hierarchy of Needs. Therapeutic relationships (individual/group) are established in the care of clients with affective and thought disorders. These relationships are based on principles of psychiatric nursing using the wellness-illness continuum as well as communication theory. Class content is applied across the life cycle, incorporating cultural and teaching/learning needs during the student's experience on an in-patient psychiatric unit as well as integrated into all other clinical laboratory experiences. ADN 205C runs concurrently with lecture component and successful achievement is required.
3 Class Hours
Prerequisites: ADN 102 Meeting Mobility Needs, BIO 132 Human Biology II and Developmental Psych

ADN 205C Psychological Concepts I — 1 Credit
Clinical Component. S/U Grade given.
3 Hours Campus Lab

ADN 206 Concepts of Obstruction and Inflammation — 3 Credits
This course focuses on the concepts of obstruction and inflammation, incorporating the nursing process, Maslow's Hierarchy of Needs and the life cycle. Theories of communicable disease and infection are presented as well as the concepts of autoimmune and allergic responses. The digestive tract is used to illustrate broad concepts of infection, inflammation and obstruction. The physiology of neoplastic growth is explored as its relates to both benign and malignant cells. The nursing process is used to correlate class theory, nursing skills and clinical skills. This course builds on the student's prior knowledge of anatomy and physiology. ADN 206C runs concurrently with lecture component and successful achievement is required.
3 Class Hours
Prerequisites: ADN 204 Regulatory Concepts

ADN 206C Concepts of Obstruction and Inflammation — 1 1/2 Credits
Clinical Component. S/U Grade given.
4½ Clinical Hours

ADN 207 Oxygenation Concepts — 3 Credits
This course focuses on the concept of oxygenation, incorporating the nursing process, Maslow's Hierarchy of Needs and the life cycle. All systems responsible for maintaining adequate systemic oxygen are explored. Also considered is the phenomenon of compensation between body systems. The interrelatedness of stress and the body's demand for oxygen becomes a central theme throughout the course.

Common disruptions in the related systems are presented as a means of establishing the nursing concepts of prevention and restoration of clients to their optimum level of health. The nursing process is used to correlate class theory, nursing skills and clinical skills. This course builds on the student's prior knowledge of anatomy and physiology. ADN 207C runs concurrently with lecture component and successful achievement is required.
3 Class Hours
Prerequisite: ADN 204 Regulatory Concepts

ADN 207C Oxygenation Concepts — 1 1/2 Credits
Clinical Component. S/U Grade given.
4½ Clinical Hours

ADN 208 Psychological Concepts II — 3 Credits
This course will focus on mental health concepts, providing a therapeutic environment and applying the nursing process using Maslow's Hierarchy of Needs. The concepts of therapeutic relationships (individual/group), are applied in the care of clients with neuroses, chemical dependency, social aggression and pediatric mental illness/retardation. These relationships are based on principles of psychiatric nursing using the wellness-illness continuum and crisis intervention and communication theories. Additionally, the history of psychiatric nursing and the legal implications regarding the care and rights of psychiatric clients will be examined. Class content is applied across the life cycle, incorporating cultural and teaching/learning needs during the student's experiences on an in-patient psychiatric unit as well as integrated into all other clinical laboratory experiences. ADN 208C runs concurrently with lecture component and successful achievement is required.
3 Class Hours
Prerequisites: ADN 205 Psychological Concepts I

ADN 208C Psychological Concepts II — 1 Credit
Clinical Component. S/U Grade given.
3 Hours Campus Lab

ADN 210 Family Centered Maternity Nursing — 3 Credits
The focus of this course is Family Centered Maternity Nursing. The maternal cycle is presented as a developmental task of the young adult, with emphasis on preparation for parenthood, and the experience of labor and delivery as a normal physiological process. The reality of parenthood, and the psychosocial and cultural implications of childbearing on the family and middle aged woman are also considered. The effects of childbirth on the adolescent and middle aged woman are also considered.

Although the effects of a normal pregnancy on the family are emphasized, selected physical and behavioral problems for the mother and common problems of the newborn are discussed.

Through application of the nursing process using Maslow's Hierarchy of Needs, the student will correlate class, nursing skills and clinical theory and skills. The course builds on the student's prior knowledge of anatomy and physiology.

During clinical practice the student will utilize hospital resources and community services available to aid individuals in their search for an optimum level of wellness. ADN 210 C runs concurrently with lecture component and successful achievement is required.
3 Class Hours
Prerequisites: ADN 102 Meeting Mobility Needs, BIO 132 Human Biology II and Developmental Psych.

ADN 210C Family Centered Maternity Nursing — 1 1/2 Credits
Clinical Component. S/U Grade given.
4½ Hours Campus Lab

ADN 293 Assessment Skills I — 1 Credit
This course is designed to expand basic physical assessment skills. Content incorporates assessment of normal anatomy and physiology, and changes of the human in normal development and the disease process. A practice lab is included.
1 Class Hour

ADN 294 Assessment Skills II — 1 Credit
This cource is designed to expand basic physical assessment skills. Content incorporation assessment of normal anatomy and physiology, and changes of the human body in normal development and the disease process. A practice lab component is included.
1 Class Hour

ADN 297 Nursing Seminar II — 1 Credit
Nursing Issues II is a broad survey course examining career planning, employment strategies, nursing history and nursing practice issues. Students are given an opportunity to assess their knowledge in preparation for the NCLEX licensure examination.
2 Seminar Hours
Prerequisites: ADN 103 Nursing Issues I, ADN 204 Regulatory Concepts, ADN 205 Psychological Concepts I, and ADN 210 Family Centered Maternity Nursing

ADN 298 Nursing Seminar III — 0 Credits
Transfer and advance placement students meet in a seminar setting to facilitate transition into the nursing program. The nursing department philosophy, use of the classroom bibliography and objectives, and nursing process are discussed. Students are provided an opportunity to practice and demonstrate selected nursing skills, Individual conferences are held with each student to assess progress.
Prerequisites: Students in this course must have met requirements for transfer or have passed the required challenge examination for advance placement.

OFFICE TECHNOLOGIES

Note-Students who fail a skill course twice will not be allowed to register a third time without taking a full semester away from the course and completing the Counseling Center tests.

DOT 103 Keyboarding — 3 Credits
Development of basic keyboarding techniques and skill building activities in order to attain speed and accuracy in typing exact copy by touch for 5 minutes with a maximum of 5 errors. Students will apply these skills in producing letters, horizontal and vertical centering exercises, memoranda, tabulations, and manuscripts.
2 Class Hours, 3 Laboratory Hours
Prerequisite: For international students, ENG 108 English as a Second Language or permission of instructor.

DOT 104 Intermediate Keyboarding — 3 Credits

Advanced keyboarding with emphasis on speed and accuracy development in keying exact copy for five minutes with a maximum of five errors and development of advanced techniques in producing different styles of letters, memorandums, manuscripts and tables.
2 Class Hours, 3 Laboratory Hours
Prerequisite: DOT 103 Keyboarding and ability to key without looking at keys. Five-one minute timing at 41 net words per minute--maximum of five errors.

DOT 108 Keyboarding — 1 Credit

Development of basic skills in typing exact copy by touch for three minutes with a maximum of three errors on the IBM Personal Computer.
3 Class Hours, 5-Week Course

DOT 109 Basic Transcription — 3 Credits

Designed to improve understanding of basic sentence structure, grammar, business vocabulary and punctuation as related to the business world. Practical application through exercises at the typewriter on rough draft copy.
3 Class Hours
Prerequisite or Corequisite: DOT 103 Keyboarding or equivalent.

DOT 110 Shorthand — 3 Credits

Beginning course in Gregg Shorthand, Series 90 System. Basic principles to promote the ability to read fluently from plates and notes. Longhand and typewritten transcription from shorthand notes dictated from unfamiliar material at minimum rate of 40 words a minute.
2 Class Hours, 3 Laboratory Hours
Prerequisite or Corequisite: DOT 103 Keyboarding or equivalent.

DOT 112 Speedwriting — 3 Credits

Basic Speedwriting principles to promote the ability to read fluently from plates and notes. Longhand and typewritten transcription from shorthand notes dictated from unfamiliar material at a minimum of 40 words a minute.
3 Class Hours, 2 Laboratory Hours
Prerequisite or Corequisite: DOT 103 Keyboarding or equivalent or concurrent enrollment in DOT 103 Keyboarding.

DOT 113 Shorthand/Speedwriting Transcription — 3 Credits

Emphasis on Shorthand speed building at a minimum rate of 60 words a minute. Integration of correct usage of principles of grammar, spelling, punctuation, capitalization, vocabulary, numbers, word division, words often confused.
2 Class Hours, 3 Laboratory Hours
Prerequisite: DOT 110 Shorthand or DOT 112 Speedwriting, DOT 103 Keyboarding, DOT 109 Basic Transcription or concurrent enrollment.

DOT 130 Freshman Orientation — 1 Credit

Introduction to the College and departmental policies and procedures. Discussions pertaining to the Department of Office Technologies options and career paths. A review of the College's services available for students.
1 Class Hour

DOT 140 Word Processing — 3 Credits

Development of text editing skills using a full-featured word processing program. Hands-on as well as theory applied to machine operations is included.
1 Class Hour, 4 Laboratory Hours
Prerequisite: DOT 103 Keyboarding

DOT 141 Word/Information Processing Concepts — 3 Credits

Introductory course for the preparation of information processing specialists. Emphasis on terminology and technology of the automated workplace.
3 Class Hours

DOT 151 Business Communications — 3 Credits

Development of desirable written and oral communication style. Review of basic writing mechanics. Composition of letters of inquiry and reply, claim and adjustment, credit and collection, sales and promotion, application. Memorandums, news releases, short reports, telegrams.
3 Class Hours
Prerequisite: DOT 103 Keyboarding or concurrent enrollment and DOT 109 Basic Transcription

DOT 215 Information Processing Applications I — 3 Credits

Advanced Text Editing Techniques used to prepare business forms and documents and continued from DOT 137, 138, 139. Students are also taught to integrate those documents and forms with information prepared through the use of spread-sheets, a data base, and graphics programs.
3 Class Hours
Prerequisite: DOT 140 Word Processing

DOT 220 Information Processing Applications II — 3 Credits

Advanced information processing skills will be taught using stand-alone and on-line computers. Students will be instructed in the areas of electronic mail, calendaring, and an advanced word processing package. Students will refine electronic office techniques involving integration of documents prepared using various software packages.
3 Class Hours
Prerequisite: DOT 215 Information Processing Applications I

DOT 231 Shorthand/Transcription Applications — 3 Credits

Emphasis on production of mailable typewritten transcripts and on increasing Shorthand speeds. Transcription at the typewriter from notes dictated from unfamiliar material at a minimum of 80 words per minute.
2 Class Hours, 3 Laboratory Hours
Prerequisite: DOT 113 Shorthand/Speedwriting Transcription or equivalent, DOT 104 Intermediate Keyboarding or equivalent, DOT 151 Business Communications

DOT 236 Machine Transcription — 3 Credits

Emphasis on increasing skill transcribing recorded materials. Continuing development of knowledge of business vocabulary, correct usage of principles of grammar, punctuation, spelling in the machine transcriptions of business documents.
3 Class Hours, 2 Laboratory Hours
Prerequisite: DOT 104 Intermediate Keyboarding, DOT 109 Basic Transcription and DOT 140 Word Processing

DOT 242 Office Procedures — 3 Credits

Final preparation for an office career. Business activities related to word processing, postal and shipping services, telephone procedures, travel arrangements, planning meetings, banking services, application of filing procedures.
3 Class Hours
Prerequisite: For Office Services Assistant and Word/Information Processing students - DOT 151 Business Communications, DOT 140 Word Processing
Corequisite: DOT 236 Machine Transcription.
For Executive Secretarial Students-DOT 151 Business Communications and DOT 140 Word Processing.

Note-This is a capstone course and must be taken during the student's final semester of DOT courses.

DOT 243 Records Management — 1 Credit

A study of classification systems including alphabetic, subject, numeric, and geographic methods. In addition, students study the development of information management programs including the record management process, procedures for controlling information, and micrographic and automation processes.
3 Class Hours, 5-Week Course

DOT 260 Directed Secretarial Experience-Model Office — 2 Credits

Secretarial students are required to work at least four hours weekly in order to gain practical working knowledge by producing various types of communications.
4 Laboratory Hours
Prerequisite: DOT 140 Word Processing

Note-This is a capstone course and must be taken during the student's final semester of DOT courses, with the exception of those students eligible for advanced placement.

DOT 262 Dynamics of Success — 1 Credit

A seminar designed for any student who wishes to develop an extra edge in landing that first job, in getting that promotion, and in being more effective in personal and professional settings. Topics include goal setting, life/work/career planning, time management, power communication skills, assertiveness, self-esteem, self-image, and self-confidence, power/executive dressing, job campaign techniques, and professionalism.
3 Class Hours for 5 weeks.

DOT 275 Internship (Procedures) — 3 Credits

An office procedures seminar in which activities related to information processing, postal/shipping services, telephone procedures, travel arrangements, planning meetings, and professionalism are performed/discussed.
3 Class Hours

DOT 275L Internship (Work Experience) — 2 Credits

Career-related employment in a major industry that complements academic preparation in the Office Technologies area. Interns train and work on state-of-the-art information processing equipment and receive on-the-job experience in a variety of office procedures.
6-month assignment
Prerequisite: Departmental Approval

DOT 299 Independent Study — 1-4 Credits

Under the guidance of a faculty member, the student will undertake a study, project, or research involving an advanced concept or problem relating to her/his major field of study. Only one independent study course is allowed per semester.
Prerequisite: Approval of faculty member and department Chairperson

PARALEGAL

All Paralegal Assistant courses are taught in the evening only.

***PLA 110 Survey of Paralegalism** **3 Credits**
Role of the paralegal and attorney. Introduction to jurisprudence and functions of administrative agencies. Local, state, federal courts. Introduction to contracts, torts, negligence, criminal procedure, real property law, law office management. Legal terminology.
3 Class Hours

***PLA 120 Advanced Paralegalism** **3 Credits**
Continuation of law office management. Introduction to research techniques, family law, surrogate, wills and estates, agency and partnership, bankruptcy, corporate law, commercial paper, workman's compensation with procedures and practices of each. Legal terminology.
3 Class Hours

***PLA 200 Real Property Law** **3 Credits**
Comprehensive survey of law of real property emphasizing practical application to a paralegal function. Analysis of forms of deeds, bonds, notes, mortgages, assignments, discharges, purchase of contracts, leases, options. Training in searching title, basic understanding of abstracts of title, real property litigation, estates, condemnation and foreclosure.
3 Class Hours
Prerequisite: PLA 110 Survey of Paralegalism or permission of department

***PLA 207 Legal Writing and Research** **3 Credits**
Development of legal research and drafting skills through use of digests, reporter systems, and other features of law libraries. Analysis of various types of legal documents for clarity, composition, conciseness. Practice in research and drafting of legal documents. Writing Emphasis Course.
3 Class Hours
Prerequisite: PLA 110 Survey of Paralegalism, ENG 110 Written Expression I, and 3 additional credits in PLA or department permission

***PLA 215 Estates, Probates and Trusts** **3 Credits**
Disposition of decedent's property, law of interstate succession, execution and probate of wills, nature and creation of trusts and the administration of estates and trusts, estate and trusts, estate and gift tax preparation.
3 Class Hours
Prerequisite: PLA 110 Survey of Paralegalism or permission of department

***PLA 220 Contracts** **3 Credits**
The law of contracts, their historical significance, formation, validity, interpretation, transfer or contractual rights. Assignment, third party beneficiaries, discharge, breach and remedies. (BUS 118 Business Law I may be substituted.)
3 Class Hours

***PLA 222 Medical Law** **3 Credits**
General coverage of how legal and medical issues are inter-related, including right to treatment, organ transplant, right to die, abortion issues, medical malpractice, informed consent, insanity defense, surrogate mothers. Lecture and discussion. How these topics affect the role of the attorney and paralegal in servicing client needs.
3 Class Hours

***PLA 225 Family Law** **3 Credits**
Pleadings relative to general practice of law in relationship to the family unit. Laws relating to marriage, divorce, annulment, custody and support, adoption, name change, guardianship, paternity. Written pleadings and necessary research pertaining to these aspects of family law.
3 Class Hours

***PLA 226 Taxation Law for Paralegals** **3 Credits**
Principles of federal taxation, analysis of IRS code and related case law, emphasis on law and concepts of taxation, basic and advanced tax law terminology, litigation involving the IRS. Exploration of social changes, and factors involving tax problems, current issues in tax reform, perspective of the paralegal regarding resolution of tax disputes.
3 Class Hours

***PLA 227 Constitutional Law for Paralegals** **3 Credits**
The practice of everyday general law as affected by the U.S. Constitution, and the bill of rights, with applications to the paralegal function. Issues of contemporary concern including cases of local courts and of the Supreme Court and their implications for law in general and society at large.
3 Class Hours

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

***PLA 240 Corporate Law** **1 Credit**
Types, uses and organization of the corporation, antitrust and securities law, mergers and consolidation, liquidation and dissolution.
1 Class Hour

***PLA 250 Municipal Law** **1 Credit**
Structure and operations of local government in New York State. Evolution of local government in New York during the first two centuries of its existence. Laws, ordinances, and operations.
1 Class Hour

***PLA 260 Labor-Management Relations (Labor Law)** **1 Credit**
Labor-management relations in the public and private sectors. Taft-Hartley Act, National Labor Relations Act and Wagner Act, unfair labor practices, labor contracts, arbitration and mediation, availability of injunctions in labor disputes.
1 Class Hour

***PLA 270 Vehicle and Traffic Law** **1 Credit**
Regulations of traffic within the State of New York. Emphasis on violations and traffic-related misdemeanors resulting from violation of the rules of the road and court proceedings resulting therefrom.
1 Class Hour

***PLA 280 Litigation and Trial Preparation** **1 Credit**
Intake procedures, systems and analysis, concepts of jurisdiction and venue, parties to an action, pleadings, pre-trial procedures, motions and special practice, special proceedings, trials, judgements and appeals.
1 Class Hour

***PLA 290 Landlord-Tenant Relations** **1 Credit**
Problems faced by landlords and tenants, private housing, live-in arrangements, covenants, leases, warranties. Tenant and landlord rights and obligations.
1 Class Hour

***PLA 299 Independent Study: Paralegal** **1-3 Credits**
An individual student project in paralegal studies which is beyond the scope or requirements of the courses offered by the program. Conducted under the direction of a faculty member or attorney, and approved by the program coordinator.
Prerequisite: PLA Survey of Paralegalism plus three additional hours in a 200 level PLA course.

PHILOSOPHY

***PHI 102 General Philosophy** **3 Credits**
Meaning of philosophy, suggestions for reading philosophy, informal logic, methodology and basic philosophical terms including idealism, dualism, naturalism.
3 Class Hours

PHI 103 Philosophy of Mind **3 Credits**
Introduction to metaphysical philosophy. Examination of the major views of reality: dualism, materialism, idealism. Analysis and discussion of evidence and arguments relating to issues such as "mind," immortality, free will vs. determinism, and the existence of God.
3 Class Hours

PHI 104 Philosophy of Religion **3 Credits**
Relation of religion and philosophy and an investigation of different concepts of God. Analysis of religious types and experiences, different attempts to justify religious beliefs. Investigation of the logic of religious experience through an analysis of the leading ideas in the philosophy of religion both as an historical and contemporary phenomenon.
3 Class Hours

PHI 111 Humanities **3 Credits**
Critical analysis of human development from the early beginnings to the present state through a thematic investigation of literature, philosophy, history and the arts. Classical, Medieval, Renaissance and Metaphysical Periods.
3 Class Hours

PHI 112 Humanities **3 Credits**
Critical analysis of human development from the early beginnings to the present state through a thematic investigation of literature, philosophy, history and the arts. Neoclassical, Romantic, Victorian, Early Modern and Late Modern Periods.
3 Class Hours

*TAUGHT EVENINGS ONLY AND WHEN ENROLLMENT PERMITS

PHI 120 Verbal Reasoning **3 Credits**
To improve the student's ability in reasoning. Concentration on qualifications, symbols, ambiguity, analysis and semantics.
3 Class Hours

PHI 201 Ethics: Moral Philosophy **3 Credits**
Main classical and modern ethical theories, including such theorists as Plato, Aristotle, Spinoza, Mill, Kant, Moore, Toulmin, Ayer, Westermarck. Comparison and contrast of normative and meta-ethical theories, the good life and how one should act, the meaning of moral judgements and the criteria of validity, justification or moral beliefs and the ground of moral responsibility.
3 Class Hours

PHI 202 Logic **3 Credits**
Analysis and practical application of the elements of logic as they apply to thinking on both a linguistic and formal level. Forms of argument, informal and formal fallacies, significance of the emotions on decision making, inductive and deductive processes. Symbolizing arguments and formal proofs of validity.
3 Class Hours
Prerequisite: Any Philosophy (PHI) course or any Mathematics (MAT) course numbered MAT 139 or higher

PHI 203 Philosophical Issues in American Education **3 Credits**
An inquiry into educational problems which can be illuminated by philosophical perspectives: educational aims, conceptions of learning, nature of knowledge, ethics of teaching, theories of moral education, school and society, equal educational opportunity, freedom and authority, and curriculum. Philosophical background to educational policy issues of special interest to prospective teachers, but also to individuals (citizens) concerned about public schools.
3 Class Hours

PHI 206 Social and Political Philosophy **3 Credits**
A philosophical study of the social/political organization of society through an examination of such topics as justice, authority, leadership, individual rights, and of the relationship between the state and various social institutions, such as family, business, church, and education.
3 Class Hours

PHI 208 Humanities and Technology **3 Credits**
An investigation of the interaction of humanities and technology. An examination of the reciprocal impacts of various human values and technology through consideration of these topics: methods of inquiry, communication, life and death, the environment, the industrial revolution, and robotics and artificial intelligence. This course was developed through a grant from the National Endowment for the Humanities.
3 Class Hours

PHI 299 Independent Study: Philosophy **1-3 Credits**
An individual student project concerned with advanced work in a specific area of philosophy. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of ordinary course.
Prerequisite: 3 semester hours of college level work in philosophy

PHYSICAL EDUCATION

Most of the Physical Education courses are half a semester in length. For the most part, the courses that take place outdoors are given in the first half of the fall semester or the second half of the spring semester; those courses that occur indoors are given in the second half of the fall semester or the first half of the spring semester.

NOTE-Students taking Physical Education courses should have a Health Questionnaire on file with the College Health Service (Wales Building, Room 104). Forms are available in the Health Service upon request.

PED 100 Archery **½ Credit**
Fundamentals of shooting - seven step approach. Proper target shooting technique and form stressed.
4 Class Hours, 11 Laboratory Hours per semester

PED 103 Backpacking **1 Credit**
A series of laboratories and lectures culminating in a four-day mandatory backpacking trip. Students learn to select, care for, and use properly the essential equipment, as well as some low cost alternatives to expensive items. The stress is on safety and low ecological impact camping.
15 Class Hours, 15 Laboratory Hours per half semester

PED 106 Badminton **½ Credit**
Instruction and practice in the various strokes. Rules, terminology and equipment. Strategy for singles and doubles.
4 Class Hours, 11 Laboratory Hours per half semester

PED 112 Bowling **½ Credit**
Bowling fundamentals including ball selection, grip, stance, approach and delivery. Etiquette, scoring, correction of basic mistakes in delivery. Classes are at off-campus site and students must pay for own games, shoe rental and transportation.
3 Class Hours, 12 Laboratory Hours per half semester

PED 118 Personal Fitness **1 Credit**
Individualized physical fitness program. Students identify their personal fitness profiles then participate in an excercise program designed to improve or maintain their fitness levels.
8 Class Hours, 22 Laboratory Hours per semester

PED 121 Golf **½ Credit**
Skills, etiquette and strategy. Students required to play nine holes and hit at a driving range, providing their own transportation and fees. Clubs provided for those without.
4 Class Hours, 11 laboratory Hours per half semester.

PED 122 Horsemanship **1 Credit**
Basic of grooming, saddling and safety procedures. Development and expansion of riding skills. Elementary knowledge of horses their care and maintenance. Two options available: 1. English. 2. Western. (Additional fee and taught off campus.)
8 Class Hours, 22 Laboratory Hours per semester

PED 127 Jogging **½ Credit**
Jogging as a possible leisure time activity. Physiology benefits, improvement of technique and basic principles of training. Individual works at own level and sets own goals. Distance usually worked: 2 miles.
3 Class Hours, 12 Laboratory Hours per semester

PED 130 Karate **1 Credit**
Classical karate on the beginning and intermediate levels. Philosophy and brief history of karate. Basic kata (forms) together with self defense and pre-arranged sparring techniques. Free sparring with no body contact. Emphasis on physical conditioning and mental discipline.
8 Class Hours, 22 Laboratory Hours per semester

PED 132 Concepts in Physical Education **2 Credits**
Emphasis on the basic knowledge, understanding and values of physical education. To help students make important decisions about their own personal fitness.
30 Class Hours per semester

PED 135 Jazz Dance I **1 Credit**
A high energy dance form that utilizes contemporary style music. Jazz dance develops rhythmic awareness, movement coordination, strength and flexibility.
8 Class Hours, 22 Laboratory Hours per semester.

PED 139 Self Defense **½ Credit**
Brief explanation of karate, judo and other martial arts. Approximately 10 basic self-defense movements which, if properly acquired and practiced, can be applicable to many situations. Basic techniques of throwing, blocking, falling, punching and general body shifting motions. No definite dress required. A student should remember that exercises are meant to increase flexibility and endurance of muscles, and the dress should be a comfortable one for this purpose. Although this is not the formal karate class, the class will be conducted with formality and discipline.
3 Class Hours, 12 Laboratory Hours per semester

PED 143 Cross-Country Skiing **½ Credit**
Instruction and practice in cross-country skiing - beginning through advanced. Conduct, terminology, safety and equipment. Classes both on and off campus. Skis, poles, bindings provided; students responsible for boots and transportation.
3 Class Hours, 12 Laboratory Hours per half semester

PED 146 Aerobics **1 Credit**
Movement and exercise done with music to achieve cardiovascular fitness, improve muscle tone, develop body awareness, increase energy. Open to both men and women.
8 Class Hours, 22 Laboratory Hours per semester

PED 147 Soccer (Women) **½ Credit**
PED 148 Soccer (Men) **½ Credit**
Instruction and practice in the fundamental skills of kicking, tackling, trapping, dribbling and heading. Rules and tactics. Team competition. Separate sections for men and women.
4 Class Hours, 11 laboratory Hours per half semester

PED 149 Snorkeling **1 Credit**
Designed to teach the swimmer the techniques of snorkeling, safety equipment selection and skills. Offered to student taking Topical Ecology during intersession.
8 Class, 22 Laboratory Hours per semester

PED 169 Tennis — 1/2 Credit
Instruction and practice in the basic strokes - forehand, backhand, serve and volley. Rules, terminology and equipment. Strategy for singles and doubles.
4 Class Hours, 11 Laboratory Hours per half semester

PED 170 Trail Riding — ½ Credit
Basics of grooming, saddling, and safety procedures. Development and expansion of riding skills - learning to cope with natural hazards like creeks, traffic, terrain. Elementary knowledge of horses, their care and maintenance. (Taught off campus and an additional fee is required.)
4 Class Hours, 11 Laboratory Hours per half semester

PED 171 Physiology of Exercise — 1 Credit
Designed to develop an understanding and appreciation for the role of consistent exercise in maintaining good health. The interrelationship of the muscular, cardiovascular, respiratory and digestive systems and the net effect of training on these systems.
1 Class Hour

PED 172 Volleyball — ½ Credit
A basic course in the fundamentals of power volleyball. Team strategy, history and rules. Drills and competitive play.
4 Class Hours, 11 Laboratory Hours per half semester

PED 175 Weight Training — ½ Credit
Introduction to the Universal Gym as a means of physical conditioning. Components of fitness and principles of training discussed. Several strength building prescriptions presented.
3 Class Hours, 12 Laboratory Hours per half semester

PED 299 Independent Study — ½ or 1 Credit
Student undertakes a project of own choice with guidance from faculty member. The project is intended for a student who has completed requirements.
Prerequisite: 2 Semester Hours in Physical Education

PHYSICAL SCIENCE

PHS 111 Physical Science for Today — 3 Credits
Beginnings of astronomy, the earth and moon, planets and satellites, the sun and other stars, cosmology. Chemistry of our atmosphere, weather and methods of modification, water cycle and pollution. Composition of the earth's crust erosional processes, earthquakes and volcanoes, plate tectonics, energy resources, nuclear radiation. Required field trips supplement classroom experience.
2 Class Hours, 2 Laboratory Hours

PHS 113 Physical Science - Astronomy — 4 Credits
The Copernican and Ptolemaic models of the solar system. The planets, sun, moon and comets. Stellar magnitudes and evolution of stars. The size and age of the universe and modern developments in astronomy and cosmology. Required field trips supplement classroom experience.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 090B and C Basic Mathematics Review or equivalent

PHS 114 Physical Science - Meteorology — 4 Credits
The atmosphere - composition, circulation, energy transfer, observations and instrumentation used. Weather phenomena - air masses, weather patterns, severe weather and optics. Forecasting through observations and plotting. Introduction to climatology, the control and classification of climates based upon principles of meteorology. Required field trips supplement classroom experience.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 090B and C Basic Mathematics Review or equivalent

PHS 115 Physical Science - Geology — 4 Credits
Crystals, minerals, rocks - their structure and identification. Erosion of the crust, its uplifts and deformation. Earthquakes and the interior of the earth, geologic dating and the physical history of the earth. Plate techtonics and continental drift, ecology from a geologic viewpoint. Required field trips supplement classroom experience.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 090B and C Basic Mathematics Review or equivalent

PHS 116 Physical Science - Energy and Environment — 4 Credits
Basic physical principles and the role of these principles in understanding and appreciating the problems of energy production, distribution and the effects on the environment. Problems of pollution and depletion of natural resources. Required field trips supplement classroom experience.
3 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 090B and C Basic Mathematics Review or equivalent

PHYSICAL THERAPIST ASSISTANT

PTA 100 Introduction to Physical Therapy I — 3 Credits
The history and development of medicine is outlined. The profession of Physical Therapy is presented with emphasis on the definition of the role and education of the physical therapist assistant. Students acquire basic knowledge of medical terminology, health-care institutional organization, ethics, medical-legal aspects of patient care, and fiscal considerations involved. Interpersonal skills and professional/patient interactions are discussed. General concepts of diseases and disease processes are introduced. Diseases of selected organ systems are studied.
3 Class Hours
Corequisite: BIO 131

PTA 101 Introduction to Physical Therapy II — 3 Credits
This course is a continuation of PTA 100. Interpersonal skills and professional/patient interactions are discussed. Diseases of selected organ systems are studied.
3 Class Hours
Prerequisite: PTA 100, Corequisite BIO 132

PTA 102 Introduction to Rehabilitation — 4 Credits
The principles of normal body alignment, body mechanics, posture, balance and movement are presented. Bed positioning, moving and lifting the dependent patient are discussed and demonstrated. Goniometrics, transfer and elevation activities, passive and self range of motion exercises are practiced. The therapeutic gymnasium, wheelchairs and assistive devices are introduced. Architectural barriers are explored. The rehabilitation of the patient with spinal cord injury, cerebrovascular accident and amputation is studied.

SPECIAL CONSIDERATIONS: Because of the need to undertake all clinical teaching at a facility off campus from Spring, 1989 through Spring 1990, this course meets one night for four clock hours and the lectures and laboratory material are integrated. Substantial preparation outside of class is required. Additional labs are scheduled on Saturdays.
6 Class Hours
Prerequisite: PTA 100, BIO 131, PHY 118

PTA 103 Physical Agents and Massage — 4 Credits
Basic principles of massage and application of modalities are presented. Specific skills practiced in the laboratory include various massage techniques; use of hot and cold packs; paraffin application; use of whirlpool baths and contrast baths; use of ultrasound; application of microwave diathermy; use of electrical stimulation; and ultraviolet and infrared radiation therapy techniques. Principles and procedures related to the use of the Hubbard tank, therapeutic pool and intermittent compression are also discussed.

SPECIAL CONSIDERATIONS: Because of the need to undertake all clinical teaching at a facility off campus from Spring, 1989, through Spring 1990, this course meets one night for four clock hours and the lecture and laboratory material are integrated. Substantial preparation outside of class is required. Additional labs are scheduled on Saturdays.
6 Class Hours
Prerequisites: PTA 100, BIO 131, PHY 118
Corequisite: BIO 132

PTA 200 Certified First Responder Course — 1½ Credits
This course uses the curriculum approved by the NYS Department of Health for Certified First Responder (FR). The FR provides initial assessment and resuscitative care to a victim until personnel qualified to provide basic or advanced life support arrive on the scene. Core material develops a knowledge and skill base in the areas of patient assessment/vital signs, cardiopulmonary resuscitation, airway adjuncts and hemorrhage control. The second section provides an orientation to trauma care and medical emergencies including knowledge and skill in the handling of victims with suspected spinal cord injury, altered mental status, chest pain, breathing difficulty, and emergency childbirth. Students must successfully complete the NYS-EMS final practical and written examinations for First Responder. Course meets daily during the first week of Summer Term I.
40 Class Hours
Prerequisite: BIO 132

PTA 200C Clinical Training I — 2 Credits
This course constitutes the student's first clinical affiliation assignment. The student will spend three work days in one health care facility working under the supervision of a physical therapist. The student will be assigned to work with patients requiring treatments with which the student is familiar including, simple modalities, simple exercise routines, ambulation and activities of daily living. The student will meet with the clinical coordinator several times during the five week period to assess progress.
15 Clinical Hours for five weeks.
Prerequisite: PTA 101, 102, 103

PTA 201 Kinesiology — 4 Credits

Muscle structure and function are reviewed. Normal human motion is studied. Manual Muscle Testing is studied in the laboratory. Posture and normal gait are reviewed. Pathological gait patterns are presented and analyzed.

SPECIAL CONSIDERATION: Because of the need to undertake all clinical teaching at a facility off campus from Spring, 1989 through Spring 1990, this course meets one night for four clock hours and the lectures and laboratory material are integrated. Substantial preparation outside of class is required. Additional labs are scheduled on Saturdays.

6 Class Hours
Prerequisite: PTA 102
Corequisite: PTA 202

PTA 201C Clinical Training II — 4 Credits

This course constitutes the student's second clinical affiliation assignment. The student will spend two days in one health care facility working under the supervision of a physical therapist. The student is assigned to work with patients requiring treatments with which the student is familiar including, simple modalities, simple exercise routines, ambulation and activities of daily living. The student is also introduced to the patient requiring therapeutic exercise routines which are part of the student's concurrent course work. The student meets with the clinical coordinator several times during the fifteen-week period to assess progress.

12 Clinical Hours
Prerequisite: PTA-C 200
Corequisite: PTA 201, 202

PTA 202 Therapeutic Exercise — 4 Credits

The principles and techniques of therapeutic exercise are presented. Specific neurological, medical, surgical and orthopedic conditions are studied. Chest physical therapy including postural drainage is practiced.

SPECIAL CONSIDERATION: Because of the need to undertake all clinical teaching at a facility off campus from Spring, 1989 through Spring 1990, this course meets one night for four clock hours and the lectures and laboratory material are integrated. Substantial preparation outside of class is required. Additional labs are scheduled on Saturdays.

6 Class Hours
Prerequisite: PTA 101 Biology 132, PHY 118
Corequisite: PTA 201

PTA 202C Clinical Training III — 6 Credits

This course constitutes the student's final clinical affiliation assignment. The student works full-time in one health care facility for a period of six weeks under the supervision of a physical therapist. The student is assigned to work with all types of patients requiring treatments with which the student is familiar including all modalities, exercise routines, gait training and activities of daily living. The student will meet with the clinical coordinator several times during the six-week period to assess progress.

40 Clinical Hours for 6 weeks.
Prerequisite: PTA-C 201, 203
Corequisite: PTA 204

PTA 203 Senior Seminar I — 5 Credits

Additional neurological, orthopedic, medical and surgical conditions are presented. Basic principles of testing and complex treatment procedures are included so that the student understands and is aware of how to assist the Physical Therapist. Additional psychosocial issues are also discussed. This course is presented in a seminar format of three or four-hour segments for the first 7 weeks of the semester.

SPECIAL CONSIDERATIONS: This course may be presented by quest lecturers and sessions may be held off campus in various health care facilities depending upon the particular topic. Significant preparation time outside of regular class hours may be required.

9 Class Hours for 7 weeks.
Prerequisite: PTA 201, 202, PTA-C 201

PTA 204 Senior Seminar II — 1 Credit

This final course of the student's academic career is designed to allow students to integrate their theoretical knowledge and their clinical experience. Students meet in seminar format and present case studies based on their clinical experience. If time permits special topics are presented and discussed. In addition a student/teacher conference is required for each student prior to graduation. Course meets three hours per day, three days per week during final two weeks of the semester.

9 Class Hours for 2 weeks.
Prerequisite: PTA 203, PTA-C 202

PHYSICS

PHY 100 Preparatory Physics — 4 Credits

Composition and resolution of forces. Kinematics and dynamics. Momentum and Energy conservation Laws. Heat.

4 Class Hours
Prerequisite: MAT 104 Basic Technical Mathematics or equivalent

PHY 118 Physics for Physical Therapist Assistants — 4 Credits

Vectors, linear motion, energy, momentum, electric fields, Ohm's Law, DC & AC circuits, motion of changes in magnetic fields, electromagnetic induction, mirrors, lenses, nature of light. For Physical Therapist Assistant Students.

3 Class Hours, 2 Laboratory Hours
Prerequsite: MAT 090 B and C Basic Math Review or equivalent

PHY 121 Physics for Radiographers — 4 Credits

Motion, conservation laws, the electric field and potential, Ohm's law, DC circuits, the magnetic field, electromagnetic induction, AC circuits, wave motion, electromagnetic waves, atomic structure, production of x-rays, nuclear structure, radioactive decay, interaction of radiation with matter, radiation detection. For Radiologic Technology students.

3 Class Hours, 2 Laboratory Hours.
Prerequisite: MAT 090 A and B or equivalent.

PHY 141 Physics I — 4 Credits

Composition and resolution of vectors, forces in equilibrium, moments of forces, elasticity, linear and projectile motion, forces and motion, rotation, work and energy, impulse and momentum, harmonic motion, fluid mechanics. temperature, thermal expansion, heat. For Engineering Technology students.

3 Class Hours, 2 Laboratory Hours
Corequisite: MAT 161 Precalculus or equivalent

PHY 142 Physics II — 4 Credits

Thermodynamics, thermal properties of gases, wave motion, and sound, electrostatics, direct current, magnetism, electromagnetic induction, alternating current, electromagnetic radiation, illumination, reflection and refraction of light, mirrors and lens, optical instruments, diffraction, nuclear energy. For Engineering Technology students.

3 Class Hours, 2 Laboratory Hours
Prerequisite: PHY 141 Physics

PHY 144 Physics II—E — 4 Credits

Thermodynamics, wave motion and sound, photometry; reflection, refraction, dispersion, light, mirrors and lenses, optical instruments, diffraction, lasers, electrostatics, potential, current, resistance, magnetics, semi-conductor theory. For Electrical Technology students.

3 Class Hours, 2 Laboratory Hours
Prerequisite: PHY 141 Physics, EET 121 Electrical Circuits

PHY 161 Physics I — 4 Credits

Structure and language of physics. Standard units of measurement of length, mass and time. Basic mathematical foundation: elementary trigonometry, vector algebra, powers of ten and significant figures. Mechanics: motion, Newtons's Law, work, energy and momentum principles, rotation. Waves and wave phenomena, mirrors and lenses, optical instruments, sound. First course in an introductory non-calculus sequence. For Liberal Arts students who need a laboratory science.

3 Class Hours, 3 Laboratory Hours
Prerequisite: MAT 161 Precalculus or equivalent

PHY 162 Physics II — 4 Credits

Concepts of heat and temperature, kinetic theory, thermodynamics. Electricity and magnetism: electrostatics, electrical circuits, electromagnetic phenomena. Modern physics: relativity, quantum theory, atomic structure radioactivity. Second half of introductory physics for Liberal Arts students who need a laboratory science.

3 Class Hours, 3 Laboratory Hours
Prerequisite: PHY 161 Physics

PHY 181 Engineering Physics I — 4 Credits

Vectors, equilibrium, kinematics, Newton's Law of Motion, centripetal force, work and energy, impulse and momentum, rotation, elasticity, harmonic motion, hydrostatics and hydrodynamics.

3 Class Hours, 2 Laboratory Hours
Corequisite: MAT 181 Calculus I with Analytic Geometry and EGR 100 Orientation

PHY 182 Engineering Physics II — 4 Credits

Relativistic mechanics, Coulomb's Law, electrostatic field, potential, capacitance, direct currents, magnetic force on currents, magnetic field of current, induced emf, inductance, alternating currents.

3 Class Hours, 2 Laboratory Hours
Prerequisite: PHY 181 Engineering Physics I
Corequisite: MAT 182 Calculus II with Analytic Geometry and EGR 100 Orientation

PHY 281 Engineering Physics III **4 Credits**
Temperature, heat transfer, thermodynamics, kinetic theory, waves, sound, geometrical and physical optics, introduction to quantum physics, atomic and nuclear physics.
4 Class Hours
Prerequisite: 1 year of calculus and PHY 182 Physics II or equivalent
Corequisite: EGR 200 Orientation

POLITICAL SCIENCE

POS 201 Introduction to American Government **3 Credits**
American political institutions, processes and behavior. The relationships among cultural, legal and social aspects of the political system. Structure, organization and function of political parties, pressure groups and mass media. Application to contemporary issues and events.
3 Class Hours

POS 203 International Relations **3 Credits**
Basic concepts and principles of world politics. International conflict resolution, international organizations, the struggle for power. Factors affecting the relationships among the major powers. Role of diplomacy, alliances, war and peace in the world arena.
3 Class Hour

POS 204 American State and Local Government **3 Credits**
Theory and practice of state and local government, utilizing a problem-solving or "policy" approach. Students are encouraged to explore in depth the workings of city and county governments locally.
3 Class Hours

POS 299 Independent Study **1-3 Credits**
An independent student project which is beyond the scope of courses currently offered by the department, directed by a faculty member with approval of the department chairperson.
Prerequisite: 3 Semester hours of political science

PSYCHOLOGY

PSY 100 Psychology of Personal Adjustment **3 Credits**
Investigation of bio-social factors which influence human behavior with emphasis on: (1) development of physical, mental, emotional, social and spiritual well-being; (2) personal responsibility for one's lifestyle and the consequences that flow from one's choices. (This course cannot be used as a prerequisite for other psychology courses.
3 Class Hours

PYS 110 General Psychology **3 Credits**
Definition and description of psychology. Topics may include functions of neural system, sensation and perception, learning, memory, motivation, emotion, conflict and frustration, personality, social psychology. Methods and statistical applications, history and fields of psychology.
3 Class Hours

PSY 210 Developmental Psychology **3 Credits**
Human development from infancy through childhood, adolescence, and adulthood. Intellectual growth, personal and social adjustment, the relationship between physical and mental development, and typical problems in various stages of the life-cycle are considered. Especially for Nursing students.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 211 Child Development **3 Credits**
The growth, maturation and development of children, including mental and motor phases, learning, motivation and personality formation.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 212 Adolescent Development **3 Credits**
The developmental tasks of the adolescent years, influence of people and institutions on self-concept. Physical, psychological, intellectual effects and intellectual growth.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 214 Abnormal Psychology **3 Credits**
Survey of the normal and abnormal personality with special emphasis on certain casual factors pertaining to maladaptive behavior. A general framework for understanding abnormal behavior patterns, including common misconceptions, accepted definitions, and the classification of mental disorders.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 217 Introduction to Counseling Theory and Practice **3 Credits**
Varied methods of counseling, employing current theories, situational examples and means for determination of method to be used. Practical cases in social sciences, clinics, hospitals and educational institutions. Overall training and personality of the counselor.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 223 Intelligence and the Mentally Retarded **3 Credits**
The several meanings of the concept of intelligence, distribution of intelligence in populations, development and organization of intelligence at different levels, concepts of retardation. The various levels and causations of retardation, development at all chronological ages, learning and employment expectations, methods of assisting with behavioral improvement, cooperative social agencies.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 227 Behavior Modification **3 Credits**
Principles of behavior modification using classical and operant techniques. Practical applications of these principles to the fields of child care, psychotherapy and correctional institutions.
3 Class Hours
Prerequisite: PSY 110 General Psychology

PSY 299 Independent Study **1-3 Credits**
An individual student project in psychology which is beyond the scope or requirements of the courses offered by the department, conducted by the department, conducted under the direction of a faculty member and approved by the department chairperson.
Prerequisites: PSY 110 General Psychology plus 3 additional hours in a 200 level PSY course

RADIOLOGIC TECHNOLOGY

RAD 100 Introduction to Radiologic Technology **3 Credits**
Overview of radiologic technology through the study of its historical development, its placement in the medical field today, the organization of a modern radiology department, professional ethics, and medicolegal aspects of radiology, and math for radiographers.
2 Class Hours, 3 Laboratory Hours

RAD 101 Radiologic Technology I **3 Credits**
Introduction to the basic principles of radiographic imaging including recording media, processing methods, radiographic quality and radiographic accessories. Lecture and laboratory are coordinated to enhance these fundamental concepts.
3 Class Hours, 1 Laboratory Hour

RAD 102 Radiologic Technology II **3 Credits**
Advanced study of the factors contributing to the radiographic image. Writing Emphasis Course.
3 Class Hours, 1 Laboratory Hour
Prerequisite: RAD 101 Radiologic Technology I or permission of instructor

RAD 103 Positioning I **1 Credit**
Instruction and practice in radiographic positioning of the appendicular skeleton.
3 Laboratory Hours

RAD 104 Positioning II **1 Credit**
Instruction and practice in radiographic positioning of the axial skeleton.
3 Laboratory Hours
Prerequisite: RAD 131 Clinical Education I

RAD 105 Medical Terminology **1 Credit**
Basic medical terminology for the student radiographer.
1 Class Hour

RAD 110 Methods of Patient Care **1 Credit**
Patient care procedures routinely performed in the radiology department.
1 Class Hours, 1 Laboratory Hour

RAD 115 Radiation Protection 1 Credit
Interaction of radiation with living organisms, particularly as related to humans. Emphasizes basic radiation protection, its philosophy and rules governing the application of ionizing radiation on humans.
1 Class Hour

RAD 131 Clinical Education I (Winterim) 0 Credit
Introduction and orientation to the radiology department in an affiliated hospital. (Successful achievement is a graduation requirement.)
2 Weeks of instruction
Prerequisite: BIO 131 Human Biology I and RAD 100 Introduction to Radiologic Technology and RAD 110 Methods of Patient Care or permission of instructor

RAD 132 Clinical Education II 2 Credits
Observation and clinical experience for the development of competency involving elementary radiographic procedures in an affiliated hospital.
16 Laboratory Hours
Prerequisite: RAD 131 Clinical Education (Winterim) or permission of instructor

RAD 133 Clinical Education III (Summer Term I) 3 Credits
Clinical experience for development of competency involving general radiographic procedures in an affiliated hospital.
40 Laboratory Hours
Prerequisite: RAD 132 Clinical Education II and BIO 132 Human Biology II or permission of instructor

RAD 201 Radiologic Technology III 3 Credits
Principles and operation of radiographic imaging equipment, including x-ray tubes, tomography, mobile units, fluoroscopy television and digital radiography.
3 Class Hours
Prerequisite: PHY 121 Physics for Radiographers or permission of instructor.

RAD 204 Advanced Positioning 2 Credits
Instruction and practice in positioning techniques involving the skull, facial bones, and advanced radiographic procedures.
1 Class Hour, 2 Laboratory Hours
Prerequisite: RAD 133 Clinical Education III or permission of instructor

RAD 216 Imaging Modalities 1 Credit
Introduction to the principles of computerized axial tomography, nuclear medicine, magnetic resonance imaging, and ultrasound.
1 Class Hour
Prerequisite: RAD 210 Radiologic Physics or permission of instructor

RAD 220 Radiologic Pathology 2 Credits
A presentation of the various medical and surgical diseases and their relationship to radiographic procedures.
2 Class Hours
Prerequisite: BIO 132 Human Biology II or permission of instructor

RAD 225 Special Radiographic Procedures 3 Credits
Introduction to radiographic examinations involving surgical procedures and specialized equipment. Writing Emphasis Course.
3 Class Hours
Prerequisite: RAD 230 Clinical Education IV or permission of instructor

RAD 230 Clinical Education IV 2 Credits
Practical application of advanced positioning techniques with emphasis on the skull and facial bones.
16 Laboratory Hours
Prerequisite: RAD 133 Clinical Education III (Summer) or permission of instructor

RAD 231 Clinical Education V (Winterim II) 0 Credit
Clinical assignment devoted to the application of radiographic procedures under direct supervision in a cooperating hospital. (Successful achievement is a graduation requirement.)
2 Weeks of instruction
Prerequisite: RAD 230 Clinical Education IV or permission of instructor

RAD 232 Clinical Education VI 3 Credits
Practical application of advanced radiographic procedures under direct supervision in an affiliated hospital.
24 Laboratory Hours
Prerequisite: RAD 231 Clinical Education V (Winterim) or permission of instructor

RAD 233 Clinical Education VII 3 Credits
Clinical experience for the development of competency.
40 Laboratory Hours

RAD 245 Radiobiology 2 Credits
Radiobiology and advanced radiation protection procedures related to diagnostic and therapeutic uses of radiation.
2 Class Hours
Prerequisite: RAD 210 Radiologic Physics or permission of instructor

RAD 250 Image Assessment 2 Credits
The basic principles and techniques of quality assurance testing presented and illustrated through laboratory experiments. Major emphasis on the tests and measurements used to analyze imaging systems with minimum information loss.
2 Class Hours, 1 Laboratory Hour
Prerequisite: RAD 210 Radiologic Physics or permission of instructor

RAD 295 Seminar in Radiography 2 Credits
Preparation of the technical report and its organization for both written and oral presentation. Readings in current literature and journals.
2 Class Hours
Prerequisite: Senior Year Status

READING AND LEARNING SKILLS

RDG 090 Reading Fundamentals 0 Credits
A non-credit course involving individual diagnosis of student's reading strengths and weaknesses, and development and implementation of program to upgrade basic skills. Content to vary with individual student.
2 Class Hours, 2 Laboratory Hours

RDG 092 College Preparatory Reading 0 Credit
An individualized course emphasizing vocabulary expansion, inferential and critical comprehension, and flexible rate. Instruction and practice of reading skills to specific content areas.
2 Class Hours, 2 Laboratory Hours

RDG 094 College Vocabulary Skills 0 Credit
Designed to provide students with several methods of mastering vocabulary encountered in college courses. Students will review dictionary skills. Learn to infer meanings from context, structural analysis, and methods of studying vocabulary for examinations. In-class practice will be designed to fit students individual needs.
2 Class Hours, for 8 Weeks

RDG 095 Language Arts for the Hearing Impaired 0 Credit
The course is an individualized language arts program for hearing impaired students who do not possess college level English language skills. Focus is on integrating all aspects of the language arts in order to enable the students to more effectively comprehend and use the English language. Materials used will include college textbooks, periodicals, short fiction and film.
3 Class Hours, 3 Laboratory Hours

NOTE: RDG 090, 092, 094, and 095 have strict attendance requirements, whereby students may be deregistered from the class for poor attendance. This deregistration may result in a loss of financial aid. Consult course outline and/or instructor for further details.

RDG 110 Efficient Reading 1 Credit
Development of skills characteristic of the mature reader. Examination of structure of material, emphasis on identification of purpose, flexibility of rate.
2 Class Hours, for 10 Weeks **Course starts at beginning of third week of semester**

RDG 120 Critical Reading 3 Credits
Emphasis is on critical reading and thinking skills. Students will analyze and evaluate college level readings beyond the literal level. Critical thinking skills will also be applied to the mastery of content area text material.
3 Class Hours

All of the following LRS courses are limited-credit activities for students wishing to enhance various study skills:

LRS 101 Study Management ½ Credit
General principles of academic success, relationship of outside work and study, scheduling and organizing time, study and concentration. Students will construct a working study schedule.
3 Class Hours, for 3 Weeks *

*** Students may register for any of these modules anytime before the twelfth week of the semester**

LRS 102 Memory and Exams ½ Credit
Theories of memory. Methods of review, strategies for taking essay and objective examinations
3 Class Hours, for 3 Weeks *

LRS 103 Textbook Mastery ½ Credit
Use of College textbooks as study aids, principles of effective text reading, text study systems. Extensive application of these principles in the student's own textbook.
3 Class Hours, for 3 Weeks *

LRS 104 Listening and Notetaking ½ Credit
Examination of organizational patterns as they exist in oral communication. Exploration of systems on notetaking, and application of systems to student's own lectures and notes.
3 Class Hours, for 3 Weeks *

*** Students may register for any of these modules anytime before the twelfth week of the semester**

LRS 105 Learning Skills 2 Credits
General principles of academic success, including scheduling and organizing time, improving concentration and memory, strategies for taking exams and class notes, and the efficient use of college textbooks.
3 Class Hours, for 12 Weeks **Course starts at beginning of third week of semester**

LRS 110 The Research Paper 1 Credit
Shaping the Paper: Development of a topic, location of appropriate resources and digestion of the material. Writing the Paper: Outlining effective composition and proper form. A hands-on approach in which students actually research a topic and compose a term paper.
2 Class Hours, for 8 Weeks **Course starts at the beginning of the fifth week of semester**

LRS 120 The Art of Thinking 1 Credit
Logic as an art. Logical principles taught in imaginitive ways to achieve understanding. Emphasis on the practice of reasoning. Fundamental logic rules are taught as tools to enable the students to gain experience and confidence in thinking about issues that are important to them.
2 Class Hours, for 8 Weeks **Course starts at the beginning of the fourth week of the semester**

LRS 130 Introduction to Microcomputers and Word Processing 2 Credits
Introduction to all aspects of the microcomputer through lecture and practice. Students will master at least one wordprocessing package, as well as gain familiarity with both a graphics and a spreadsheet package. This course is intended for students who have no prior knowledge of microcomputers.
3 Class Hours for 10 weeks. **Course starts at the beginning of the fifth week of the semester**

LRS 140 Introduction to Dental Hygiene 2 Credits
This course is designed to provide students with an introductory background in oral anatomy, dental terminology and personal oral hygiene. Additional topics will be covered to assist students with a better understanding of life as a student dental hygienist and a graduate dental hygientist.
1 Class Hour, 4 Laboratory Hours

RUSSIAN

PLACEMENT IN LANGUAGE - Generally, one year of high school foreign language is equivalent to one semester in college. Students with two years of a language in high school should register for intermediate level courses. Students with three or more years may not enroll in Beginning Russian.

RUS 101/102 Beginning Russian I & II 4 Credits
Basic principles of grammar and syntax. Reading and discussion of graded literary and cultural texts.
4 Class Hours

SIGN LANGUAGE

HUS 120 Basic Sign Communication I 3 Credits
Introduction to conversationally relevant signs, fingerspelling, grammatical sign principles, and background, cultural, and linguistic information related to deaf people and sign language. The Direct Experience Method is used to help students learn to sign by experiencing the use of signs directly. Some emphasis is on non-manual communication (Visual training, gestures and mime are used to help develop a comfort level for using face, hands and body for communication purposes). Approximately 400 signs are introduced.
3 Class Hours

HUS 220 Basic Sign Communication II 3 Credits
Review of Basic Sign I. Expressive and receptive fingerspelling as well as recall of vocabulary. Sign vocabulary is further organized around basic conversational topics and questions. Sign grammatical principles are expanded and practiced. Approximately 300 signs are introduced.
3 Class Hours
Prerequisite: HUS 120 Basic Sign Communication I

HUS 230 Basic Sign Communication III 3 Credits
Additional and expanded topics for conversation are introduced with the associated vocabulary. Variations of signed messages by incorporating different sign principles and mime. More emphasis on conversational fluency in sign. The student will be able to generate increasingly more complex signing structures. Approximately 300 additional signs are introduced.
3 Class Hours
Prerequisite: HUS 220 Basic Sign Communication II

SOCIAL SCIENCE (INTERDISCIPLINARY)

SOS 111 Public Affairs 3 Credits
Contemporary problems examined in the context of American democratic social and political beliefs and practices. Meaning of liberty, equality, individualism, justice, and civic obligation. Proposals for problem solving via "public policy".
3 Class Hours

SOS 120 Science Technology and Society 3 Credits
A study of the interaction of the forces of science and technology with contemporary society, such as government, industry, family, education and organized religion. In addition, students examine the major views (utopian optimist vs. dystopian pessimist) on our contemporary scientific technology. Examine such current topics as recombinant DNA research, computers, nuclear weapons, nuclear power, Star Wars, etc.

SOS 125 Global Security or Nuclear Armageddon: Nuclear Weapons and the Prospects for Human Survival 3 Credits
Short history of the development of nuclear weapons and the first atomic war. Actual and theoretical effects of nuclear weapons on human beings, organized societies and the environment. Threat of nuclear war in the immediate future, efforts at nuclear arms control and nuclear disarmament, possible security alternatives to nuclear weapons.
3 Class Hours

SOS 128 The Battle of Gettysburg: It's Impact on American Society 1 Credit
A survey of the structure and the interrelationships of selective issues in American society. The approach is socio-historical, with an attempt to integrate the major theories and techniques of socio-historical analysis as applied to issues of historical interest relative to a pivotal Civil War battle. Of special interest will be a critical analysis of the decision-making process and the importance of civic responsibility in as much as it relates to the events leading up to the battle, the strategy of the conflict and the anticlimatic aftermath.

SOS 130 Man, Technology and Environment 3 Credits
Biological, economic, and political dimensions of the environmental crises. The conditions created by population growth, a rising standard of living, the increased demand on natural resources, and the advance of technology. Alternative strategies to deal with pollution and energy problems.
3 Class Hours

SOS 146 Introduction to Gerontology 3 Credits
Multidisciplinary analysis of the bio-psychological characteristics of older persons. Examinations of major issues and dynamics involved in the process of growing old.
3 Class Hours
Prerequisite: PSY 110 General Psychology or permission of instructor

SOS 150 Introduction to Human Service Work — 6 Credit †

Treatment modalities, goal planning, facility usage, counseling, helping skills, principles of human development, etiology, normalization, detection. Institutionalization effects, empathy training, evaluation, problem solving, transactional skills, theoretical systems. ethical issues. Psychoactive drugs, habilitative and rehabilitative programs, community services.

† Credit available only to those who complete successfully a certified institution-based training program and credit is only applicable toward the Associate in Science degree in the Liberal Arts Division's Mental Health and Retardation Emphasis. Credit cannot be used to fulfill other social science requirements.

SOS/COM 155 Media and Society — 3 Credits

An in depth examination and analysis of the impacts and effects of the mass media upon society and the converse societal influences upon the media. Includes such issues as media concentration, portrayal of violence, stereotyping, the public's right to know, among others.
Prerequisite: COM 100 or SOC 110

SOS 170-179 Contemporary Cultures

Studies in comparative cultures featuring social, political, ecomonic, literary/artistic detail. The United States and at least one foreign culture compared and contrasted as a means of gaining insight into and understanding both.

SOS 170 United States and the Mideast — 3 Credits

Examination of the cultural and political dimensions which underlie current U.S.-Middle East relations and conflicts both internal and external to the region. Historical perspective on comparative cultures and value systems. Political and cultural differences. Energy security, strategic importance to the U.S., and the Arab-Israeli conflict, the Gulf States , Egypt, Turkey, Iran.
3 Class Hours

SOS 225H Post-Industrial Civilization: Honors Seminar — 3 Credits

Study of the planet as an independent unit facing the challenge of survival with hemispheric differences between "post-industrialized" and "non-industralized" societies. Interconnections between economic, political, social systems with varying values and traditions. Major works in studies of the future examined for possible answers to such basic survival questions as problems of population, production and distribution of food, energy and other essential resources, ultimate difficulties of pollution and waste disposal.
4 Class Hours

SOS 226H War, Peace and a Just World Order Honors Seminar — 3 Credits

Is war the product of our nature or our nurture? Is the war system an inherent part of the nation state system? Can war be controlled or eliminated in the existing world? If not, on what shape and form will a new world have to be based? How will it be brought into being? These questions and related issues will be addressed as we ponder the prospects of war, peace and a just world order as humanity enters the 21st Century.
3 Class Hours

SOS 275 Community Internship — 3 Credits

For qualified students a work experience in the professional field in which they plan to major, as they intern in Broome County Government or non-profit human services agencies. Requires application, interview, and a "B" average.
1 Class Hour, 8 Practicum Hours

SOS 290 Social Science Field Experience — 3 Credits

Each student spends a minimum of 90 hours working in a community. Periodic meetings, outside reading, and written reports are required. During the meetings, agency functions and goals will be discussed and analyzed.
1 Class Hour
Prerequisite: 6 Credit hours in psychology or sociology plus completion of or concurrent enrollment in 3 additional credit hours in either of these areas.

SOCIOLOGY

SOC 110 Introduction to Sociology — 3 Credits

Sociological facts and principles dealing with the scientific study of human relationships. Emphasis on analysis and study of culture and human society, socialization, groups and group structures. Satisfaction, collective behavioral patterns and the concept of social institutions. Initial experiences for students who desire an introduction to the sociological perspective.
3 Class Hours

SOC 111 Social Problems — 3 Credits

The sociology of social and urban problems. Topics may include crime, population, inequality, discrimination, mental illness, attitudes toward work, social control and the dynamics of social change. Students should be aware that individual instructors approach these problems in different ways, depending on students' needs and instructors' interests. SOC 110 Introduction to Sociology is recommended as an initial experience.
3 Class Hours

SOC 120 Ethnic Groups — 3 Credits

Survey of the structure and interrelationships of selective ethnic minority groups. The approach is socio-historical, with an attempt to integrate the major theories and techniques of sociological analysis as applied to issues of ethnic concern. (Not offered in 1988-89)
3 Class Hours

SOC 210 Crime and Deviant Behavior — 3 Credits

The theoretical aspects of deviance as crime, variations in crime rates, the social and psychological causes of crime, other deviant behavior and the salient research discoveries in these areas. Specific areas within criminology will be reviewed from a multidisciplinary approach to permit as broad an understanding of the problem as possible.
3 Class Hours
Prerequisite: SOC 110 Introduction to Sociology

SOC 230 The Family/Marriage and its Alternatives — 3 Credits

Social and personal factors which make for adequate family functioning, the forms the family takes, its internal processes and the functions it serves in society. Covers systematically the important theoretical and experimental ground on those issues relevant to both the scholarly and practice-minded student.
3 Class Hours
Prerequisite: SOC 110 Introduction to Sociology

SOC 250 Introduction to Social Work — 3 Credits

Social work as a profession in the context of the social welfare institution; historical and philosophical roots of soical work and social welfare; attributes of the social work role; social workers' knowledge base; fields of social work practice.
3 Class Hours
Prerequisite: SOC 110 Introduction to Sociology and PSY 110 General Psychology

SOC 299 Independent Study — 1-3 Credits

An individual student project in sociology which is beyond the scope or requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.
Prerequisite: 3 Semester Hours in Sociology

SPANISH

PLACEMENT IN LANGUAGE - Generally, one year of high school foreign language is equivalent to one semester in college. Students with two years of a language in high school should register for intermediate level courses. Students with three or more years may not enroll in Beginning Spanish.

SPA 101, 102 Beginning Spanish — 4, 4 Credits

Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Reading and discussion of graded literary and cultural texts.
4 Class Hours
Prerequisite: SPA 101 Beginning Spanish for SPA 102

SPA 201 Intermediate Spanish I — 3 Credits

Intensive review and continuation of grammar and syntax. Intensive and extensive reading of literary works of recognized authors. Aural comprehension and oral practice in the classroom.
3 Class Hours
Prerequisite: SPA 102 Beginning Spanish

SPA 202 Intermediate Spanish II — 3 Credits

Intensive and extensive reading of literary works of recognized authors. Classroom discussion and conversation based on these texts, in the language.
3 Class Hours
Prerequisite: SPA 201 Intermediate Spanish I

SPA 203, 204 Spanish in Conversation and Composition Through Literary Works — 3,3 Credits

The Spanish language in conversation and basic composition practice through the reading of various literary works. Dialogues and scenes, either of original student creation or of published works. (Not offered in 1988-89)

3 Class Hours

Prerequisite: SPA 202 Intermediate Spanish II or its equivalent for SPA 203,SPA 203 Spanish in Conversation and Composition Through Literary Works for SPA 204

SPEECH

SPK 102 Effective Speaking — 3 Credits

Speech communication through voice, words, and action. Voice production, diction, platform presence. Organization of ideas. Practice in presenting speeches of different types.

3 Class Hours

SPK 299 Independent Study: Speech — 1-3 Credits

An individual student project concerned with advanced work in a specific area of speech. Conducted under the directions of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.

Prerequisite: 3 semester hours of college level work in Speech

THEATER

THR 101 Theater Appreciation — 3 Credits

Art of the theater to increase understanding and appreciation of drama. A cultural approach considering the interrelationship of all aspects of production including plays, acting, directing, costume, make-up and lighting. Attendance at local productions. (Students taking this course may also be interested in LIT 230 American Drama, LIT 233 World Drama.)

3 Class Hours

THR 109, 110 Practicum in Theater Design and Technology — 3, 3 Credits

Stage design (both lighting and scenic) and construction techniques are studied first hand, as students participate in actual production of two plays each semester. Problems encountered during a production are analyzed. Individualized instruction is increased as students begin to focus on their particular areas of interest.

3 Class Hours each

THR 111 Acting: External Style — 3 Credits

Fundamental acting techniques. Development of individual skills and disciplines relative to external acting techniques. Use of face, voice and movement.

3 Class Hours

THR 112 Acting: Internal Style — 3 Credits

Intensive application of acting techniques through scene study and performance. Problems of character analysis, internal acting and style.

3 Class Hours.

THR 117 Creative Dramatics — 3 Credits

Fundamentals of creative dramatics, its use in teaching, recreation and rehabilitation. Introduction to techniques used and practical application opportunities.

3 Class Hours

THR/COM 121 Make-up for TV and Film — 1 Credit

Use of prosthetics and cosmetics. Techniques of executing age, character, and stylistic effects. Students to provide pertinent materials.

2 Studio Hours

THR/COM 140 Presentation for Radio/TV — 3 Credits

Presentation as on-air personality. Development of visual and vocal techniques relating to presentation of news, interviews, commercials and announcements.

3 Class Hours

THR 151 Theater Production I — 3 Credits

Classroom and workshop study relative to production of plays, including historical and dramatic perspective. Script analysis, play selection, audience research, publicity, administration of a theater.

3 Class Hours

THR 152 Theater Production II — 3 Credits

Classroom and workshop training for stage production. Special attention to stage management, operation of stage crews, house management. Coordination of visiting and touring theater companies regarding production and logistics.

3 Class Hours

Prerequisite: THR 151 Theater Production I

THR 161 Playwriting — 3 Credits

Scriptwriting for the theatre. Attention to style, editing, and suitability for performance.

3 Lecture Hours

Prerequisite: ENG 110 and any THR course

THR 190 Broome Community College Theater — 1 Credit

Students who participate in the plays and performances of the BCC Theater Co. receive one credit per semester. See page 31.

THR 201, 202 Children's Theater — 3, 3 Credits

Touring children's theater company during academic year. Performances at area elementary schools for classtime and assembly programs. Visiting with students pre/post production. Design and construction of costumes, sets, and properties. Analysis of children-oriented plays, development of scripts, rehearsal and performance.

3 Class Hours each

THR 203 Summer Touring Children's Theater Company — 3 Credits

Touring children's theater company during summer. Performances at area recreation centers, parks, camps and playgrounds. Visiting with children pre/post production. Design and construction of costumes, sets, and properties. Analysis of children-oriented plays, development of scripts, rehearsal and performance.

3 Class Hours

THR 218 Role Study and Characterization — 3 Credits

The varied creative processes by which an actor might develop a characterization are studied in theory and explored in practice with emphasis upon screnework.

3 Class Hours

THR 219 Periods and Styles of Acting — 3 Credits

Procedures and techniques necessary for acting in theatrical and period productions such as Elizabethan, Italian Renaissance, Restoration, Absurdist, and innovative styles.

3 Class Hours

Prerequisite: THR 218 Role Study and Characterization or permission of instructor

THR 231 Stage Directing I — 3 Credits

Examination of the perspective of the director in relation to himself, the play the actors, designers, playwright, and the collaborative evolution of the production. Development of directing methods and techniques in terms of casting, pictorial emphasis and harmony, rehearsal and production procedures. Preparation of prompt book and direction scenes. Proscenium and non-proscenium techniques.

3 Class Hours

THR 232 Stage Directing II — 3 Credits

Detailed analysis of directing in relation to theatrical styles and periods. Examination of the techniques of such directors as Meyerhold, Antoine, Guthrie and Kazan. Direction of pertinent scenes.

3 Class Hours

THR/COM 266 Acting for TV, Film, and Commercials — 3 Credits

Proficiency in performing before the camera. Character analysis, quick study, re-takes, voice-overs, studio projection, facial nuances, and subtlety of mannerism.

2 Class Hours, 2 Studio Hours

THR 299 Independent Study: Theater — 1-3 Credits

An individual student project concerned with advanced work in a specific area of theater. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course

Prerequisite: 3 semester hours of college level work in theater

TRAVEL AND HOTEL TECHNOLOGY

TAE 101 Principles and Practice of Food Service I — 3 Credits

This course is a lecture/laboratory course which covers food theory and laboratory work. It is an introduction to basic food preparation, basic baking, food service sanitation, personnel organization, kitchen etiquette and supervision. The student also receives instruction in production and preparation techniques in a variety of typical food service operations.
1 Class Hour, 6 Laboratory Hours

TAE 102 Travel and Tourism I — 3 Credits

Major tourist destinations of the world and their culture, attractions, language, currency and flag carriers. An introduction to the American Airlines SABRE system.
3 Class Hours

TAE 103 Front Office Management — 3 Credits

A study of the structure of the front office operation as it relates to the hotel/restaurant organization: guest service, reservation and rooming procedures, rate structures, cashiering, billing and night audit principles.
3 Class Hours

TAE 105 Front of the House Management — 3 Credits

A study of the management network of the Front of the House as it relates to guest relations, staffing, reservations and the Back of the House personnel. Also covered will be the major types of Table Service, Dining Room Etiquette, Mixology, Wine Tasting and a study of the Wine Regions.
3 Class Hours

TAE 110 Sanitation Management — 1 Credit

A course in the fundamentals of restaurant and hotel organization and sanitation. In this certification course the student will learn the control points in food service, the importance of sanitation, and safety procedures.
1 Class Hour

TAE 113 Introduction to Sabre Automation — 3 Credits

This course will introduce the American Airlines Sabre System to those students who have no previous computer training, or who would like a refresher course. It will include the building of the passenger name record and other features of the system such as pricing, seat assignment, cars and hotels.
3 Class Hours

TAE 117 Travel and Tourism II — 3 Credits

The history and growth of tourism including the social, economic, political and future trends in the industry. Principles, philosophies and practices will also be examined as well as continued work on the SABRE system.
3 Class Hours
Prerequisite: TAE 102

TAE 206 Supervisory Housekeeping and Property Management — 3 Credits

This course is a study of the chain of command in a Hotel and/or a Restaurant facility. The function and responsibilities of each position in the organizational structure and their importance to successful management. The topics include maintenance, care and control of furnishings, safety, fire pevention, sanitation principles, and proper training of personnel.
3 Class Hours

TAE 207 Hospitality Principles — 3 Credits

The course is a study of growth and development of the future of the Hotel/Restaurant Hospitality Industry and the potential for employment in the various segments of the Industry. This course will provide an orientation to future managers on how to be problem solvers by studying the current trends and conditions and relating them to future decisions.
3 Class Hours

TAE 208 Hotel and Restaurant Law — 3 Credits

A study of the laws affecting hotel and restaurant operations. Topics include: serving alcohol with care, certification common law of innkeeping, food and beverage regulations, liabilities for safety and security of guests and others and their property.
3 Class Hours

TAE 212 Hotel/Motel Marketing & Advertising — 3 Credits

Covers the application of marketing as it relates to site location, customer demand, image creations, advertising and displays, direct mailing and newspaper releases. Also covered is the importance of operational needs, internal and external promotions.
3 Class Hours
Prerequisite: BUS 141

TAE 217 Travel and Tourism III — 3 Credits

A detailed analysis of major travel modes and travel facilities including air, rail, ship, hotels, motels and restaurants. Also included, will be an introduction to domestic and international ticketing. Students will learn to prepare the tickets both manually and on the SABRE system. Lessons on building a PNR will also continue.
3 Class Hours
Prerequisite: TAE 102

TAE 242 Sales Promotion and Convention Service — 3 Credits

This course will present the basic principles and procedures of Hotel and Restaurant Sales as it relates to the convention and group business industry. The following areas will be addressed: facilities, customers, services, competition, sales presentations, advertising methods, staffing and location.
3 Class Hours

TAE 256 Banquets and Catering — 3 Credits

The course is a laboratory/lecture course in which teams of students will be given practice, under supervision, in planning, ordering, and executing complete menus for various functions. This course includes various styles of Off-Premise and On-Premise catering, Accommodator Service and Kosher Catering. Special attention will be given to "Garde Manger" work.
2 Class Hour, 3 Laboratory Hours
Prerequisite: TAE 101

TAE 265 Food, Beverage, and Labor Costs — 3 Credits

A study of the principles of cost controls essential to an effective hotel and restaurant operation through an application of food, beverage and labor control procedures as they apply to menu management.
3 Class Hours
Prerequisite: BUS 100

TAE 291 Travel and Tourism IV — 3 Credits

An in depth look at how a business in the travel industry operates. Using the travel agency as a reference point, students will learn what is needed to open a business, how to manage it, and the proper office procedures to use. In addition, emphasis will be placed on using travel related reference materials, interviewing clients and selling travel services. Continued work on the SABRE system included.
3 Class Hours
Prerequisite: TAE 102, TAE 117 and TAE 217

TAE 298A Travel and Tourism Internship — 3 Credits

On the job experience in area Travel Agencies, Hotels, Car Rental Companies, and Airlines.

TAE 298C Restaurant Internship — 3 Credits

Career-related employment in the area restaurants for the student completing the degree in Restaurant Management. The intern will experience the opportunity to apply the theory learned in the program within the setting of restaurants.

TAE 298D Hotel Internship — 3 Credits

Career related job experience in area hotels for students in the Hotel Management program. The intern will experience the opportunity to apply the theory learned in the classroom within the hotel setting.

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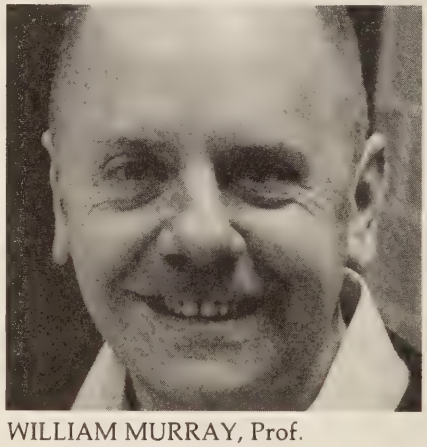
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Sandra Whittaker

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Charles Ducar
Sally Gillespie
Gerald Hlopko
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Tom Lipa
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B.S., SUNY at Cortland
M.P.S., University of Colorado
LAWRENCE TRUILLO
Assistant Director
A.A., Broome Community College
B.A., SUNY at Oneonta
M.S., University of Scranton

STUDENT ACTIVITIES
DAVID R. MASLAR, Director
B.A., M.A.T., SUNY at Binghamton
Emeritus
R. BRUCE MACGREGOR
COLLEGE ENHANCEMENT

COLLEGE ENHANCEMENT

ALUMNI OFFICE

SUSAN R. LOBO, Director
B.S., SUNY at Binghamton

FACULTY-STUDENT ASSOCIATION

GARY B. FINCH, Executive Director
A.A.S., Broome Community College
B.S., SUNY at Binghamton

BOOK STORE

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A.A.S., Broome Community College
DANIEL D. DEVONA, Merchandise Manager
B.F.A., Rochester Institute of Technology

BCC FOUNDATION

ROGER L. HARTMAN, Executive Director
B.S., Bowling Green University
M.S., Elmira College

THE LEARNING CURVE-CHILD CARE CENTER

NANCY SELIGA, Director
A.A.S., Maria Regina College

CURRICULUM ADVISORY COMMITTEES

The College's career-oriented curriculums have advisory committees to help maintain an awareness of the changing skill and training needs in the particular fields; establish communication among the college, the community, employers and educational representatives; and advise the College about career curriculums on a continuing basis. These advisory committees are comprised of a cross-section of people involved in each field. Following is the make-up of the respective advisory committees:

DIVISION OF BUSINESS AND OFFICE TECHNOLOGIES

GENERAL BUSINESS

EDWARD ANDREJKO
Binghamton Savings Bank
JOSEPH BALOK
General Electric
RONALD BARBER
Matco Electric Co.
DONALD BEHR
Great American
FRANK BERRISH
IBM Credit Union
DAVID CAHILL
Prudential-Bache
FAYE CLAUS
Metrocenter
EDWIN HOGG
Chase Lincoln First Bank
TOM KETRICK
Ketrick Insurance
MARK E. LEYDECKER
Endicott Johnson Corp.
ROBERT LINDSLEY
Security Mutual Life Insurance Co.
ANTHONY MAIONE
The Night Shift
RAYMOND McCORMACK
WBNG-TV
JAMES MC COY
Number 5 Restaurant
BRIAN MC MAHON
McMahon & Blum co.
SCOTT PAKEL
Raymond Corp.
VINCENT PASQUALE
State University of NY at Binghamton
ROB SALAMIDA
Rob Salamida Company
DENNIS WALKER
Dennis J. Walker C.P.A.

OFFICE TECHNOLOGIES

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Singer-Link Co.
KATHY BROWN
Universal Instruments Corp.
ROBERTA BRUNDAGE
Oxford Gerontology Center
RUTH EPPS
WBNG-TV
RON KASCHAK
IBM-Endicott
REGINA W. MURPHY
NYSEG
ISABEL P. ROSSI
Stafkings
BERNARD SETTA
General Electric
BENITA SICKLES
NYSEG
ELLEN SMITH
Chernin & Gold, attorneys
ANDREA TOTMAN
IBM Corp. in Owego
KAREN TREICHLER
Singer-Link Co.

TRAVEL AND TOURISM

STEVE V. BRIAN
JUNE JAMES
Metro Travel Ltd.
SHARON L. DYER
Don Travel/Ask Mr. Foster
VANESSA LAVIOLA
Broome County Travel Agency

HEALTH SCIENCES DIVISION

DENTAL HYGIENE

LARRY P. BLEIER, D.M.D.
Periodonist
DONALD BRONSKY, D.D.S.
Orthodontist
BECKY DUNHAM, R.D.H.
HARRIET MARMILLION, R.D.H.
DAVID PAYNE, D.D.S.
Oral Surgeon
A.J. PERNA, D.D.S.
General Practice
KATHLEEN TESTA, R.D.H.
SHARON TIER, R.D.H.
KENNETH WARNER, R.D.H.
J. MICHAEL WEBER, D.M.D., M.S.D. Periodontist

DIETARY MANAGER

RAYMOND DENNISTON
Director of School Lunch
Susquehanna Valley Schools
JOSEPH GAY
Dean of Health Sciences
Broome Community College
KAREN HOJSIK, R.D.
Consulting Dietitian
GLORIA ROCKISAK, CDM
Binghamton General Hospital
JEANNE STRACUZZI, R.D.
Consulting Dietitian
Broome County Office for Aging
STUDENT, appointed annually

MEDICAL ASSISTANT

DR. BRUCE BOWLING
Medical Advisor
Endwell Primary Care Affiliates
LYNN AUGENSTERN, C.M.A.
Broome Community College
Medical Assistant Department
THOMAS BIELEFELDT
Exec. Director
Medical Societies of Broome, Chemung, Delaware, and Otsego Counties
TERESSA H. BURAN, C.M.A.-C.
Chairperson
Broome Community College
Medical Assistant Department
PHYLLIS DEVINE
Student
M. ELLEN DONOVAN
Medical Assistant
Chenango Bridge Medical Center
JOSEPH K. GAY
Dean of Health Sciences
Broome Community College
BEA GRACE, R.N.
Endwell Primary Care Affiliates
DORIS NEWHART
Broome County Medical Bureau
DEMETRIO A. PEGUERO, M.D.
IBM Medical Administration Dept.
DIANA PIGOS, C.M.A.
Medical Assisting Graduate
RICHARD C. RONEY
Vice President
Key Bank of Central New York
LORETTA SPINELLI, C.M.S.
Orthopedic Associates
STUDENTS, appointed annually

MEDICAL LABORATORY TECHNOLOGY

MAXIMILLIAN BORSKI
Medical Laboratory Technology
Broome Community College
SUSAN DANSER
Alumnus
BRENDAN FLYNN
Chemistry Department
Broome Community College
JOSEPH K. GAY
Dean of Health Services
Broome Community College
MARY GREENE
Lourdes Hospital
DR. ROBERT LEVIN
Norwich-Eaton Pharmaceutical Co.
JULIA PEACOCK
Chairperson
Medical Laboratory Technology
Broome Community College
WILLIAM TROLIO
Mary Imogene Bassett Hospital
Cooperstown, NY
DAVID WALSH
Biological Sciences
Broome Community College
JOHN WALTERS
United Health Services
DR. LOREN WOLSH
Chairman, United Health Services
STUDENTS, appointed annually

MEDICAL RECORD TECHNOLOGY

JAMES BRADEN
Director, Medical Records
United Health Services
V. JANE CASAMENTO, A.R.T.
Director, Medical Records
Chenango Memorial Hospital
MARY CASTERLINE, A.R.T.
Director, Medical Records
Willow Point Nursing Home
KATHLEEN DEPUYDT, R.R.A.
Assistant Director, Medical Records
Our Lady of Lourdes Hospital
DOROTHY ERNEY, R.R.A.
Director, Medical Records
Binghamton Psychiatric Center
JOSEPH K. GAY
Dean of Health Sciences
Broome Community College
DR. ALFRED PETERSON
Chenango Bridge Medical Group
HAROLD SIEFERT
Vice-President of Finance
Our Lady of Lourdes Hospital
STUDENT, appointed annually

NURSING ADVISORY COMMITTEE MEMBERSHIP

MELISSA BRENNAN, R.N., M.S.N.
Director of Nursing
Our Lady of Lourdes Memorial Hospital
JUDY FRANKLIN, R.N., M.S.N.
Assistant Administrator for Nursing
Willow Point Nursing Home
JOSEPH K. GAY
Dean of Health Sciences
Broome Community College
JEAN KING
Graduate of BCC Nursing Program
J. PATRICIA LEE
BCC Nursing Faculty
Broome Community College
JOANN MANIAGO
Consumer of Health Care
SHIRLEY MOEHRING, R.N., B.S.N.
Acting Asst. Commissioner for Home Health Services
Broome County Health Department
JUDY ST. JOHN
Guidance Counselor
Windsor High School
JANET WRIGHT
Chairperson, BCC Department of Nursing
Broome Community College

PHYSICAL THERAPIST ASSISTANT

SUSAN BAKKEN, P.T., Director
Physical Therapy Department
Binghamton General Hospital
Binghamton, New York
MARTHA GERTY, P.T.
Broome Developmental Center
Binghamton, New York
DENISE JOHNSON, R.N.,
Administrator
Vestal Nursing Center
Vestal, New York
SALLY SPALIK, P.T.A.
Our Lady of Lourdes Memorial Hospital
Binghamton, New York
SUSAN RENDSBURG, P.T.,
Director
Rehabilitation Services, Inc.
Binghamton, New York
MICHELE WILLIAMS, Head P.T.
Outreach Clinic of Lourdes Mem. Hospital
Endwell, New York
VIRGINIA NOLAN, P.T., Director OT/PT
Our Lady of Lourdes Memorial Hospital
Binghamton, New York
CHARLES CROLL, MA, Professor of Social Science
Broome Community College
Binghamton, New York
MARY MORE, MSN, Assoc. Prof. Nursing
Broome Community College
Binghamton, New York

RADIOLOGIC TECHNOLOGY

ANDREW ADAMS, M.D.
Binghamton, NY
Medical Advisor
DAVETTE CUMMINGS, R.T. (R)
FRANK EMICK, R.T. (R)
NANCY BUTTON, R.T. (R)
Chairperson, Radiologic Technology Department,
Broome Community College
PHILIP FRANCIS, R.T. (R)
Our Lady of Lourdes Hospital
Department of Radiology
ROBERT KNACK, M.D.
Our Lady of Lourdes Hospital
Department of Radiology
EDWIN LIS
Radiology Business Manager,
Wilson Memorial Hospital
DAVID LISI, M.D.
Binghamton General Hospital
PATRICIA MAHLER, R.T. (R)
Supervisor,
Our Lady of Lourdes Hospital
Department of Radiology
BRIAN WETZEL, RT (R)
Wilson Memorial Hospital
STUDENTS, appointed annually

LIBERAL AND GENERAL STUDIES DIVISION

INTERIOR DESIGN

ANNE COTTEN
Interior Designer and Asst. Prof.
Broome Community College
ROBERT KELLER
Assistant Professor, Art
Broome Community College
CORINNE MAXON
Professor, Home Economics
SUNY College at Oneonta
BEVERLY MC LEAN
Designer
LILLIAN NEZELEK
Guidance Coordinator
Binghamton High School

SPECIAL CAREER PROGRAMS

CRIMINAL JUSTICE

FRANCIS SHORT
Department Chairperson
Broome Community College
CARL FENESEY
Director, Broome County Security
RICHARD FITZPATRICK
Coordinator, Criminal Justice
Broome Community College
JOHN L. JONES
Lieutenant, Vestal Police Department
ROBERT KENT
New York State Parole Board
DAVID NEMEC
Broome County Probation
ROGER SHALLER
Binghamton Police Department

RICHARD WAFFLE
New York State Police
J. BRADLEY WAHL
Broome County Probation Department

EARLY CHILDHOOD

MARILYN SCHAFER
Coordinator, Early Childhood
Broome Community College
HELEN BUEMI
Child Development Council
ANNE CAMPBELL
Handicapped Children's Assoc.
MARGARET CARNEY
Student and Broome County
Child Development Council
LUCILLE FRATTONE
Kiddee Kampus Daycare
LIBBY HOBART
PAT NASH
Day Nursery Assoc.
NANCY SELIGA
BCC and Childcare Service
BRENDA TESTANI
Little World-St. James Preschool

FIRE PROTECTION TECHNOLOGY

STEPHEN ANDREW
Captain, Endicott Fire Department
MICHAEL ASWAD
Broome County Fire Coordinator
DAN COLLINS
Student, Fire Protection Technology
DAVID DARLING
JEROME FIVES
IBM Corp. in Endicott
PATRICK GRACE
Columbia Gas
J. P. RYAN
Broome Developmental Center
FRED SINGER
IBM

PARALEGAL ASSISTANT

MATTHEW VITANZA
Attorney at Law
Coordinator, Paralegal Asst.
Broome Community College
JON BLECHMAN
Attorney at Law
LYNN FORESMAN
Legal Assistants of Broome County
IDA GIANELLA
Surrogate Court
HON. JOHN HILLIS
Binghamton City Court Judge
BEVERLY LEGOS
Court of Claims
DEBORAH MCGUIRE
CLA
Hogan & Sarzynski
MADELINE NEMCEK
Scanlon & Vetrano, attorneys
EUGENE PECKHAM
Attorney
Hinman, Howard & Kattell
TANYA SCHMELER
Columbian Mutual Life Insurance
PATRICIA SEXTON
Legal Assistant
Pearis, Ressequie, Kline & Barber

TECHNOLOGY, ENGINEERING AND COMPUTING DIVISION

CHEMICAL ENGINEERING TECHNOLOGY

JAMES DORSEY
Unit Director, Chemical Quality Services Division
Eastman Kodak Company
DR. CARL ERNST
Senior Vice President, Research and Development
Anitec Image Corp.
BARBARA LASKY
Supervisor, Laboratory Services
NYS Electric and Gas
DR. LOUIS LIETO
Director, Anti-Infective Product Development
Norwich-Eaton Pharmaceuticals
MICHAEL McDONALD
Manager Quality,
Telecommunications Products Division
Corning Glass Works
JAMES SHURTLEFF
Development Engineer,
Impregnation/Dim-Stab
IBM Corporation
PATRICIA WEISLANDER
Sandia Corporation
DR. WILLIAM WITTOSCH
Manager, Employee Training and Development
International Paper Company

CIVIL ENGINEERING TECHNOLOGY

JAMES BRYDEN AIA
JAMES CONNOR
District Engineer
Department of Transportation
THOMAS S. COUGHLIN
President, EMJ/McFarland-Johnson Engineers, Inc.
WILLIAM LANE
President, William Lane
General Contractors
DENNIS T. O'DEA
Project Engineer, NYSEG
GARY WOOD, P.E.

ELECTRICAL ENGINEERING TECHNOLOGY

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Universal Instruments
JOHN EKSTROM
NYSEG
CRAIG HOFFMAN
ROBERT NEW
Singer-Link Co.
ROBERT O'CONNOR
General Electric
RICHARD PAINTER
Gould Computer Systems
JOSEPH SVOBODA
BOCES
ELDRED PAUFVE
Universal Instruments
ROBERT ROSE
IBM Corp.
SAMUEL STOKES
General Electric
CHARLES TAYLOR
SUNY at Binghamton
JAMES WALKER
Doron Precision Systems
JACK WHITE
IBM Corporation
GEORGE YEZZI
NYSEG

MECHANICAL ENGINEERING TECHNOLOGY

FRED BARTHOLOMEW
Marketing Services Manager,
Raymond Corporation
LOUIS EVANGELISTI
Supervisor, Drafting Standards
Singer-Link Co.
PETER MAJESTIC
Research & Development
Corning Glass
DAVID MERITHEW
Manager, Mechanical Design
Universal Instruments
RAYMOND PERINE
Vice-President
NYSEG
RICHARD VLASAK
IBM Corporation

OTHER

VOCATIONAL EDUCATION

IRENE CAMPO
Nurse Practitioner
Susquehanna Medical Affiliates
JAMES COREY
Vice President and General Manager
Corey's Northgate Ford and Mazda
MICHAEL DOLLINGER
Training Coordinator
Universal Instruments Corporation
MARTHA PILOTTI GERTY
Physical Therapist
Broome Developmental Center
JAMES GRAHLMANN
Production Manager
Frito-Lay, Inc.
MICHAEL HAGGERTY
Director of Training
Broome County Department of Social Services
VIOLET McHALE
Binghamton Savings Bank
GERALD TAYLOR
Principal
Chenango Forks Central School

STATE UNIVERSITY OF NEW YORK (SUNY)

D. BRUCE JOHNSTONE, Chancellor

Broome Community College is one of the 64 colleges that comprises the State University of New York (SUNY), which was established by the State Legislature in 1948. The 64 units include 30 locally-sponsored two-year community colleges like Broome.

The University's 64 geographically dispersed campuses bring educational opportunities within commuting distance of virtually all New York citizens. In academic 1986-87 more than 370,000 students enrolled in its classrooms or pursued study at home, at their own pace, through such innovative institutions as Empire State College, a campus without walls. Of the 370,000, about 30 percent are 24 years of age or older.

The University is uniquely organized into a system comprised of:

Four University centers, two medical centers, 12 colleges of arts and sciences, a non-residential college, four specialized colleges, five statutory colleges, six agricultural and technical colleges, and 30 locally-sponsored community colleges.

In addition to baccalaureate studies, 12 of the senior campuses offer graduate study at the doctoral level, and 22 at the master's level.

The two-year colleges offer associate degree opportunities in a wide range of technical areas. They also provide transfer programs for students wishing to continue to the baccalaureate degree. In the 1986-87 college year, the community colleges enrolled about 180,000. This number is about equally divided into full-time and part-time categories. Ten educational Opportunity Centers serve the educationally deprived by upgrading occupational skills for more gainful employment and identifying students with college potential to prepare them for enrollment in the state's public and private colleges.

State University is governed by a Board of Trustees, appointed by the Governor, which determines the policies to be followed by the 34 State-supported campuses. The 30 community colleges operate under the program of State University and have their own local boards of trustees. SUNY's motto is "To Learn-To Search-To Serve" which emphasizes the three-fold mission of education, research and public service.

State University awarded a degree to its one millionth graduate in the spring of 1985. The majority of them are pursuing their careers in communities across the state.

COLLEGE OF THE STATE UNIVERSITY OF NEW YORK (SUNY)

COMMUNITY COLLEGES

(Locally-sponsored, two-year colleges under the program of State University)

Adirondack Community College at Glens Falls
Broome Community College at Binghamton
Cayuga County Community College at Auburn
Clinton Community College at Plattsburgh
Columbia-Greene Community College at Hudson
Community College of the Finger Lakes at Canandaigua
Corning Community College at Corning
Dutchess Community College at Poughkeepsie
Erie Community College at Williamsville, Buffalo, and Orchard Park
Fashion Institute of Technology at New York City
Fulton-Montgomery Community College at Johnstown
Genesee Community College at Batavia
Herkimer County Community College at Herkimer
Hudson Valley Community College at Troy
Jamestown Community College at Jamestown
Jefferson Community College at Watertown
Mohawk Valley Community College at Utica
Monroe Community College at Rochester
Nassau Community College at Garden City
Niagara County Community College at Sanborn
North Country Community College at Saranac Lake
Onondaga Community College at Syracuse
Orange County Community College At Middletown
Rockland Community College at Suffern
Schenectady County Community College at Schenectady
Suffolk County Community College Selden, Riverhead, Brentwood
Sullivan County Community College at Loch Sheldrake
Tompkins Cortland Community College at Dryden
Ulster County Community College at Stone Bridge
Westchester Community College at Valhalla

*** While authorized to offer such baccalaureate and master's degree programs as may be approved pursuant to the provisions of the Master Plan, in addition to the associate degree, the Fashion Institute of Technology is financed and administered in the manner provided for community colleges

STATE-OPERATED COLLEGES

UNIVERSITY CENTERS

State University of New York at Albany
State University of New York at Binghamton
State University of New York at Buffalo
State University of New York at Stony Brook

COLLEGE OF ARTS AND SCIENCE

Empire State College
State University College at Brockport
State University College at Buffalo
State University College at Cortland
State University of New York Empire State College
State University College at Fredonia
State University College at Geneseo
State University College at New Paltz
State University College at Old Westbury
State University College at Oneonta
State University College at Oswego
State University College at Plattsburgh
State University College at Potsdam
State University College at Purchase

COLLEGES AND CENTERS FOR THE HEALTH SCIENCES

Health Sciences Center at Brooklyn
Health Sciences Center at Syracuse
College of Optometry at New York City
(Health Sciences Center at Buffalo) *
(Health Sciences Center at Stony Brook) *

COLLEGES OF TECHNOLOGY

State University of New York College of Technology at Alfred
State University of New York College of Technology at Canton
State University of New York College of Agriculture and Technology at Cobleskill
State University of New York College of Technology at Delhi
State University of New York College of Technology at Farmingdale
State University of New York College of Agriculture and Technology at Morrisville
State University of New York College of Technology at Utica/Rome**
(Upper Division and master's programs)

SPECIALIZED COLLEGES

State University of New York College of Environmental Science and Forestry at Syracuse
State University of New York Maritime College at Fort Schuyler

* The Health Sciences Centers at Buffalo and Stony Brook are operated under the administration of their respective University Centers

** This is an upper-division institution authorized to offer baccalaureate and master's degree programs.

**** These operate as "contract colleges" on the campus of independent universities.

STATUTORY COLLEGES****

New York State College of Agriculture and Life Sciences at Cornell University
New York State College College of Ceramics at Alfred University
New York State College College of Human Ecology at Cornell University
New York State College School of Industrial and Labor Relations at Cornell University
New York State College College of Veterinary Medicine at Cornell University

STATE UNIVERSITY OF NEW YORK BOARD OF TRUSTEES

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Nan Johnson, B.A., L.L.B., Rochester
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Rosemary C. Salomone, B.A., M.A., Ed.M., Ph.D., J.D., LL.M., Jamaica
Arlette Slachmuylder, Albany
Darwin R. Wales, B.A., LL.B., Binghamton
(two vacancies)
Chancellor
D. Bruce Johnstone, B.A., M.A., Ph.D.

University Counsel and Vice Chancellor for Legal Affairs
Sanford H. Levine, A.B., J.D.

Secretary of the University
Martha J. Downey, B.S., M.A.

Senior Vice Chancellor
Harry Spindler, B.A., M.P.A.

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APPROVED CALENDAR
1989 - 1990 ACADEMIC YEAR

Fall

Registration	August 21 - 24
Classes Start	August 28
Last Day for 100% Refund	September 1
Labor Day (College Closed)	September 4
Last Day for 50% Refund	September 8
Last Day to Withdraw from a course with no Grade (25% Refund)	September 22
Mid-Semester Break	October 9, 10
Last Day to Withdraw from a course with a "W" Grade	November 8
Thanksgiving Break	November 22 - 26
Last Day of Classes	December 18
Reading/Study Day	December 19
Final Exams	December 20-23
Final Grades Due	December 27

Spring

Martin Luther King, Jr. Day (College Closed)	January 15
Registration	January 16 - 19
Classes Start	January 22
Last Day for 100% Refund	January 26
Last Day for 50% Refund	February 2
Last Day to Withdraw from a course with no Grade (25% Refund)	February 16
Mid-Semester Break	March 5, 6
Last Day to Withdraw from a course with a "W" Grade	April 3
Spring Break	April 9 - 15
Last Day of Classes	May 15
Reading/Study Day	May 16
Final Exams	May 17-19, 21
Final Grades Due	May 24
Graduation	TBA

NOTES

NOTES

MAP OF THE CAMPUS

A-"ALMS HOUSE" BUILDING
- Art Studio
- Music Studio

AT-APPLIED TECHNOLOGY BUILDING
- Computer Studies
- Electrical Engineering Technology
- Engineering Science and Physics
- Technology, Engineering and Computing Division

AX-AUXILIARY BUILDING
- Police Academy

B-BUSINESS BUILDING
- Accounting
- Business Administration
- Computer Center
- Hotel/Restaurant Management
- Marketing/Management Sales
- Medical Assistant
- Medical Record Technology
- Office Technologies
- Radiologic Technology

F-901 FRONT STREET
- Biological Sciences
- Medical Laboratory Technology
- Nursing

LRC-CECIL C. TYRRELL LEARNING RESOURCES CENTER
- Audio-Visual
- Information Center for Evening & Part-Time Students
- Learning Assistance Center
- Library
- Mathematics
- Reading and Study Skills
- Science Learning Center
- Writing Center

M-MECHANICAL BUILDING
- Civil Engineering Technology
- Mechanical Engineering Technology
- Special Career Programs

MAINT.- MAINTENANCE BUILDING
- Duplicating Center

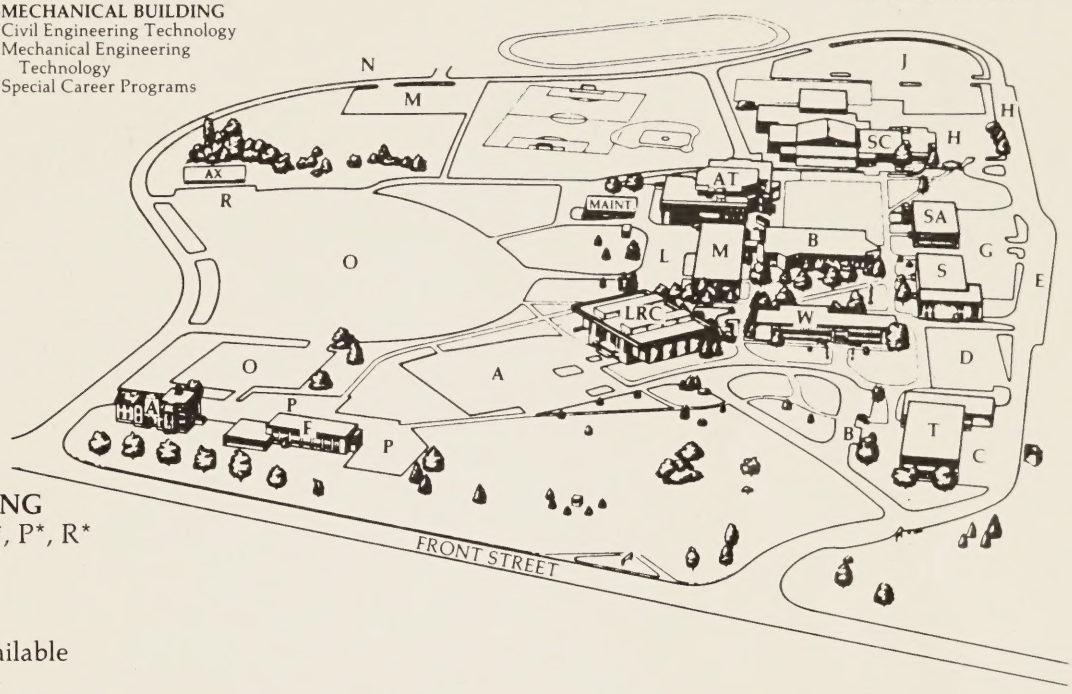
S-SCIENCE BUILDING
- Chemical Engineering Technology
- Dental Hygiene

SA-STUDENT AFFAIRS BUILDING
- Housing
- PACE Program
- Student Activities
- Student Lounge

SC-STUDENT CENTER
- Book Store
- Cafeteria
- Gymnasium
- Little Theater
- Physical Education

T-TITCHENER HALL
- Communications/Media Arts
- Health Sciences
- Liberal and General Studies
- Mathematics

W-WALES BUILDING
- Admissions Office
- Administrative Offices
- Alumni Office
- Center for Community Education
- Counseling and Student Development Center
- Education Opportunity Program
- Educational Technology
- Finance Office
- Financial Aid
- BCC Foundation
- Health Service
- Office for Sponsored Programs
- Placement Office
- Registrar's Office
- Student Affairs Office



STUDENT PARKING
Lots: J, M, N, O*
FACULTY/STAFF PARKING
Lots: A*, C, D*, G*, H*, L*, P*, R*
VISITOR'S PARKING
Lots: B*, E

*Handicapped Parking Available

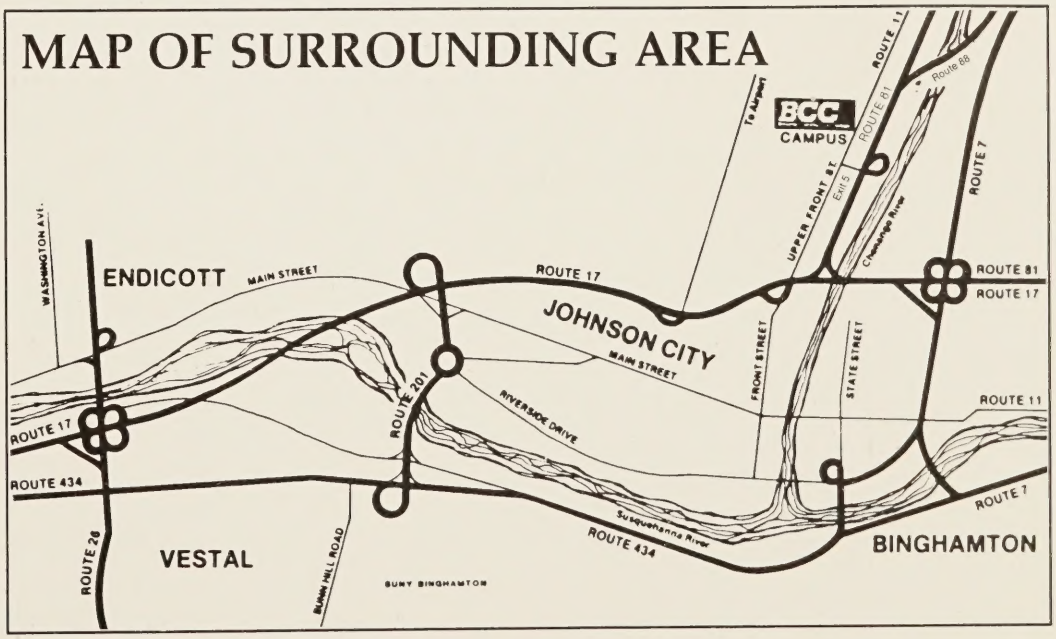
PARKING

All vehicles must be registered with the Campus Security Office. Students are allowed to park only in student lots until 5 PM after which an open parking policy exists. A parking map is available in the Campus Security Office. However, certain general rules are always in effect:

- No parking on grass, roadways, or lot perimeters
- No parking in handicapped zones without a permit (issued by Campus Security)
- Lot D is reserved for staff at all times

Violations of the regulations will be ticketed and fined.

MAP OF SURROUNDING AREA



BCC
Broome Community College